RESOLUTION NO. 298

A RESOLUTION OF THE BOARD OF DIRECTORS OF LA PUENTE VALLEY COUNTY WATER DISTRICT ADOPTING NEW WATER USE RATES AND SERVICE CHARGES

WHEREAS, the La Puente Valley County Water District ("the District") provides water service to residents and businesses within its boundaries, most of which is within the boundaries of the City of La Puente; and

WHEREAS, the District approved Resolution 254 on October 15, 2018, which adopted new rates and charges for water service and instituted a multiyear (5 year) rate increase plan to cover projected District expenses; and

WHEREAS, the Board of Directors is concerned about the increased expenses for the continued operation of the District's water system, including significant increased costs for the procurement of replacement water through the program established by the Main San Gabriel Groundwater Basin Watermaster ("Watermaster"); increased costs for power, chemicals and other water treatment costs, insurance, wages and necessary capital improvement projects identified by the District's recently Water Master Plan, in addition to regular rising operation and maintenance costs; and

WHEREAS, the District's Board of Directors directed District Staff to have a water rate study prepared to review the District's costs of service and revenue requirements, including monies needed for prudent levels of reserves, and provide a recommendation for water rates and service charges (collectively referred to as "water rates") which will generate sufficient revenue to meet the District's cost of providing water service to its customers over the next five years; and

WHEREAS, District Staff engaged NBS Government Finance Group, Inc. ("NBS") to conduct a thorough review of the District's costs and financial needs of the District and prepare a water rate study (the "Water Rate Study") for the purposes of recommending a fair and equitable water rate structure that complies with current laws governing the setting of water rates, including but not limited to, Article 13D, Section 6 of the California Constitution ("Proposition 218"), and that will provide adequate revenues to meet the District's water system financial obligations; and

WHEREAS, a full, true and correct copy of the Water Rate Study is hereby incorporated herein by this reference and attached hereto as Exhibit "**A**"; and

WHEREAS, on August 21, 2023, the District's Board of Directors considered and approved a written "Notice of Proposed Adjustments to Water Use Rates and Charges" and directed District Staff to provide said notice as required by law to all property owners of record within the District and all other District customers for a public hearing to be conducted on October 9, 2023, to consider adoption of the water rates and charges proposed in the Water Rate Study; and

WHEREAS, pursuant to Proposition 218, all customers and property owners of record within the District's service area were mailed a notice of the public hearing at least 45 days prior to October 9, 2023, which notice contained: (1) the amount of the proposed rate adjustment, (2) the basis on which the rate adjustment is calculated, (3) the reason for the rate increase, and (4) the date, time and location of the public hearing at which the proposed rates will be considered for adoption, together with an explanation of the right to submit written protests to the proposed increase; and

WHEREAS, a full, true and correct copy of the "Notice of Proposed Adjustments to Water Use Rates and Charges" is incorporated herein by this reference and attached hereto as Exhibit "**B**"; and

WHEREAS, on October 9, 2023, prior to the adoption of this resolution, the District's Board of Directors conducted and concluded a duly noticed public hearing concerning the proposed water rate increase as set forth in the Water Rate Study and considered all written and oral comments presented; and

WHEREAS, at the close of such public hearing, no majority written protest to the proposed increase was presented under Proposition 218; and

WHEREAS, the proposed rate increase is Statutorily Exempt under the California Environmental Quality Act ("CEQA") Guidelines section 15273 as it applies only to rates to obtain funds necessary to operate and maintain the District's water system; and

WHEREAS, all legal prerequisites to adoption of a water rate increase have occurred prior to the adoption of this Resolution.

NOW, THEREFORE, THE BOARD OF DIRECTORS OF LA PUENTE VALLEY COUNTY WATER DISTRICT DOES RESOLVE, DETERMINE, FIND, AND ORDER AS FOLLOWS:

SECTION 1. The District's Board of Directors (the "Board") hereby finds that the above recitations are true and correct and, accordingly, are incorporated as a material part of this Resolution; and

SECTION 2. The Board hereby finds that the water rate increase is Statutorily Exempt pursuant to CEQA Guidelines section 15273 as it applies only to rates to obtain funds necessary to operate and maintain the District's water system; and

SECTION 3. The Board finds and determines that the adjustment of the water rates is in the best interest of the District and its constituents and complies with current laws, including but not limited to, Proposition 218; and

SECTION 4. The Board does hereby approve the water rate increase as set forth in the Water Rate Study, a copy of which is attached to this Resolution as Exhibit "**A**," and directs District staff to implement such water rates as set forth therein effective immediately.

ADOPTED, SIGNED AND APPROVED by the Board of Directors of La Puente Valley County Water District at a meeting held on October 9, 2023.

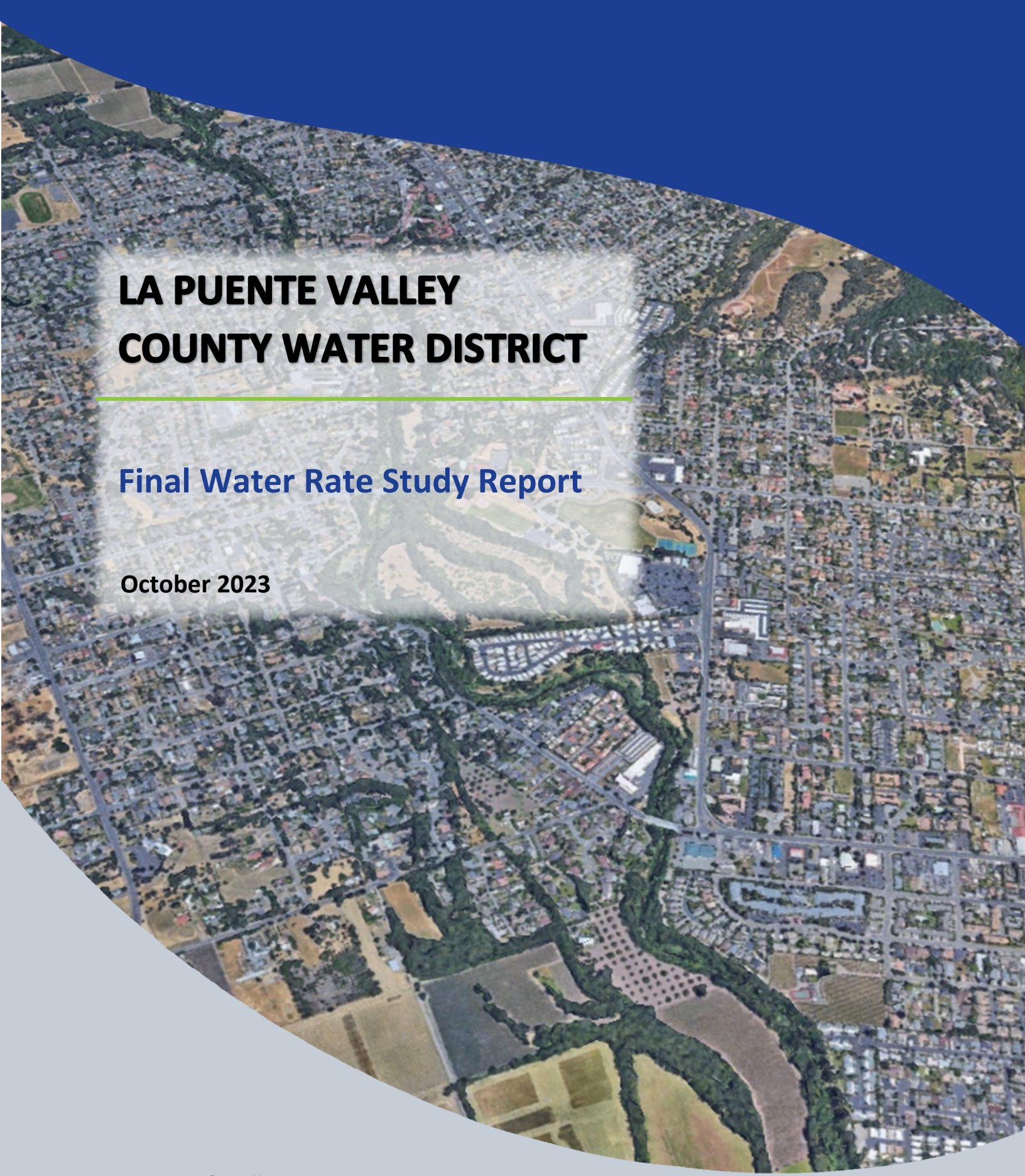
Ayes:
Nays:
Abstains:
Absent:

_____
Henry P. Hernandez, President
Board of Directors
La Puente Valley County Water District

ATTEST:

_____
Roy Frausto, Board Secretary

EXHIBIT A



LA PUENTE VALLEY COUNTY WATER DISTRICT

Final Water Rate Study Report

October 2023

Prepared by:

NBS
helping communities fund tomorrow
nbsgov.com

Corporate Headquarters
32605 Temecula Parkway, Suite 100
Temecula, CA 92592
Toll free: 800.676.7516

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Section 1. EXECUTIVE SUMMARY

Background and Purpose

BACKGROUND

The La Puente Valley County Water District provides water service to approximately 2,500 connections in portions of the Cities of La Puente and Industry. Because it is important for the District to routinely update its cost-of-service basis for the rates it charges its customers, as required by California statutes, the District adopted Resolution No. 254 in October 2018.

This resolution implemented new water use rates and service charges, consisting of separate rates for three customer classes: 1) single family, 2) multi-family/commercial/industrial, and 3) public authority/irrigation. Within the single-family customer class, the rate structure includes two tiers that correspond to the cost of local groundwater sources vs. purchased/leased water costs. Further, there are five zones for all customer classes that reflect the pressure zones. The final increase of the five-year adopted schedule occurred on October 15, 2022.

The costs of the District's local water supplies have increased by over 23 percent over the last four years and the new groundwater pumping assessment for the San Gabriel Valley will add significant costs. Additionally, the 2015 San Juan Capistrano court decision established more restrictive standards for calculating water rates in California, and the District must now "demonstrate the cost basis" for tiered volumetric rates[1].

PURPOSE

To address these concerns, the District retained NBS earlier this year to prepare a cost of service water rate study to ensure that water rates collect sufficient revenues over the next five years to meet the District's financial needs. These needs include funding operating costs, maintaining reasonable reserves, and funding capital improvements. Other objectives include evaluating the fairness and equity of the rate design and promoting revenue stability.

This report summarizes the rates and charges developed in this study; the rates are based on industry standards and intended to meet the requirements of Proposition 218 (or Prop 218)[2]. This report is part of the District's efforts to document the study for Prop 218 purposes and to ensure the District communicates the results of this study with its customers.

The initial results were presented at a June 26, 2023, public workshop. The District Board will decide whether to direct staff to prepare Prop 218 public notices and set the rate hearing in a public hearing that may be as late as September 2023; rates will go into effect on October 15, 2023.

[1] This court decision required that tiered rates demonstrate the actual amount of water and the costs included in each tier.

[2] California Constitutional Provision, Article XIII D, Section 6.

Key Findings

PROPOSED WATER RATE DESIGN AND FINANCIAL PLAN

Fixed monthly charges will continue to be based on meter sizes, vary by customer class, have two tiers for residential customers, and increased volumetric rates that reflect the additional pumping costs for delivering water to the District's five elevation zones. Among several financial plan alternatives considered, the proposed rates are intended to fund 100 percent of the capital improvement plan as well as a new administration building.

REVENUE REQUIREMENTS AND PROJECTED RATES

The District needs to complete ongoing rehabilitation and replacement projects that include significant costs for recycled water projects, a nitrate treatment system, pumping improvements, well rehabilitation, waterline replacements, vehicles, and equipment. These projects average almost $1.1 million per year over the next five years[3] compared to approximately $600 thousand per year of rate funded projects in the District's last rate study. General inflation appears to be increasing at a much higher rate than historically seen.

The District's annual net revenue requirements (i.e., total revenue requirements less non-rate revenues) are projected to vary from year to year, beginning at $2.5 million in 2023 and increasing to $3 million in 2027. Assuming the proposed rate increases are adopted, total rate revenue would increase from $2.9 million in 2023 and end at just under $4.6 million in 2027.

During the course of this study, the District evaluated several funding alternatives, each with different rate increases, as shown in Figure 1. Alternative 4 was the option the District Board chose to implement.

FIGURE 1. CIP FUNDING BY RATE ALTERNATIVE

Summary of Water System Financial Results by Rate Alterantive						
Financial Plan/CIP Funding Alternatives	Ending Cash Reserves (≈$3.4 M Target)	Rate Increases				
		Effective Oct 2023	Effective Oct 2024	Effective Oct 2025	Effective Oct 2026	Effective Oct 2027
1. Fund 25% of CIP & Admin. Bldg.	$3.7 M	3.00%	3.00%	3.00%	3.00%	3.00%
2. Fund 50% of CIP & Admin. Bldg.	$3.6 M	6.00%	6.00%	6.00%	6.00%	6.00%
3. Fund 75% of CIP & Admin. Bldg.	$3.0 M	8.00%	8.00%	8.00%	8.00%	8.00%
4. Fund 100% of CIP & Admin. Bldg.	**$3.4 M**	**12.00%**	**12.00%**	**12.00%**	**10.00%**	**10.00%**
5. Fund 100% of CIP & Admin. Bldg. w/ $4 M Rev. Bonds	$3.5 M	4.00%	6.00%	6.00%	8.00%	8.00%

[3] *This amounts to approximately $7.5 million in capital improvement program (CIP) costs.*

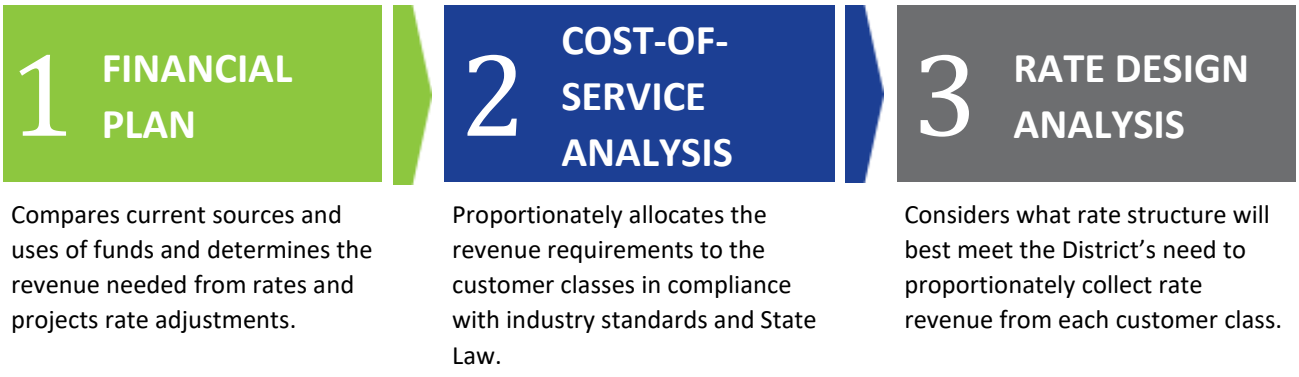
Section 2. RATE STUDY METHODOLOGY

Overview of Rate Study Methodology

The methodology followed in this rate study is similar to the District's previous study, and focuses on rate design, accurately assessing projected water demands.

The three components typically included in rate studies are summarized in Figure 2 and are intended to follow industry standards and reflect the fundamental principles of cost-of-service ratemaking embodied in the American Water Works Association (AWWA) Principles of Water Rates, Fees, and Charges[4], also referred to as Manual M1. This methodology also addresses Prop 218 requirements that rates not exceed the cost of providing the service (i.e., rates must be proportionate to the cost of providing service for all customers).

FIGURE 2. PRIMARY COMPONENTS OF A RATE STUDY



The District's previous (2018) rate study used a Base-Extra Capacity methodology, whereas NBS' rate analysis follows a Commodity-Demand methodology. The primary difference is that the 2018 approach assigns costs based on peak-hour, peak-day, and average monthly water consumption and relies on typical industry factors for those cost allocations. NBS' approach uses actual peak month vs. average month consumption, which we feel better represents actual customer class usage characteristics. Both are presented in the AWWA M1 Manual.

As a result of this water rate study, rate increases – or more accurately, increases in the total revenue collected from rates – are recommended for each of the next five years. The recommended volumetric rates continue to use two tiers for single-family residential customers and uniform rates for of the commercial/ industrial/multi-family and public authority/irrigation customer classes. The rates are adjusted by 12 percent for the first three years, and then 10 percent the last two years of the five-year period (i.e., 2023 through 2027).

Rate Design Criteria

It is important for utilities to send proper price signals to their customers about the actual cost of providing service, and a second tier for residential customers can be an effective means of accomplishing this. However, the cost basis of a second tier must be demonstrated by actual costs of the District's source of

[4] *Principles of Water Rates, Fees, and Charges, Manual of Water Supply Practices, M1, AWWA, seventh edition, 2017.*

supplies. Based on the District's two primary supply costs, we believe continuing with a second tier complies with Prop 218 mandates and the criteria set forth in the San Juan Capistrano case.

Sending proper price signals can also be addressed through the magnitude of the rates and the rate structure design. In other words, both the amount of revenue collected and the way in which it is collected from customers are important. The District's variable costs are relatively high which supports the District's decision to collect more rate revenue from volumetric rates than from fixed charges.

Several more general criteria are also considered in setting rates and developing sound rate structures. The fundamentals of this process have been documented in various rate-setting manuals[5]. The following is a list of common rate structure objectives:

- Rates should yield the necessary revenue in a stable and predictable manner.
- Rates should minimize unexpected changes to customer bills.
- Rates should promote fairness (i.e., cost based).
- Rates should avoid discrimination.
- Rates should maintain simplicity, certainty, convenience, and freedom from controversy.
- Rates should comply with all applicable laws (in California, this specifically includes Prop 218).
- Rates should be easy to understand and to administer.

KEY FINANCIAL ASSUMPTIONS

The following are the key assumptions used in the water rate analysis:

- **Funding Capital Projects** – The analysis assumes:
  - Capital costs are funded with rate revenue and reserve funds, with no additional debt issued.
  - One hundred percent of capital projects listed in the financial plans along with an administration building are assumed to be funded.
- **Reserve Targets** – Reserves for operations and capital needs are set at levels established by District staff and adopted by the District Board. Reserve targets used in the analysis are as follows:
  - Capital Improvement Reserve – 10 percent of net assets.
  - Rate Stabilization Reserve – 45 days of water sales revenue.
  - Emergency/Disaster Reserve – 1 percent of net assets.
- **Inflation and Growth Projections** – Annual inflation and growth assumptions were determined using the District's historical data, government publications, and assumptions in published plans such as the Water Master Plan and Urban Water Management Plan; they are as follows:
  - General cost inflation is assumed to be 3 percent annually.
  - Customer growth is 0.0 percent annually per the District's Master Plan.
  - Labor cost inflation is 5.0 percent annually per the District's Budget.
  - Benefit cost inflation is 5.0 percent annually per the District's Budget.
  - Energy cost inflation is 5.0 percent annually per the District's Budget.
- **Pass-Through Costs** – This provision allows the District to adjust for certain operating costs that are beyond the District's control. This would include costs associated with purchased water, RDA

[5] *From M1 Manual, AWWA, seventh edition, 2017, p. 105. Also, James C. Bonbright; Albert L. Danielsen and David R. Kamerschen, Principles of Public Utility Rates, (Arlington, VA: Public Utilities Report, Inc., Second Edition, 1988), p. 383-384.*

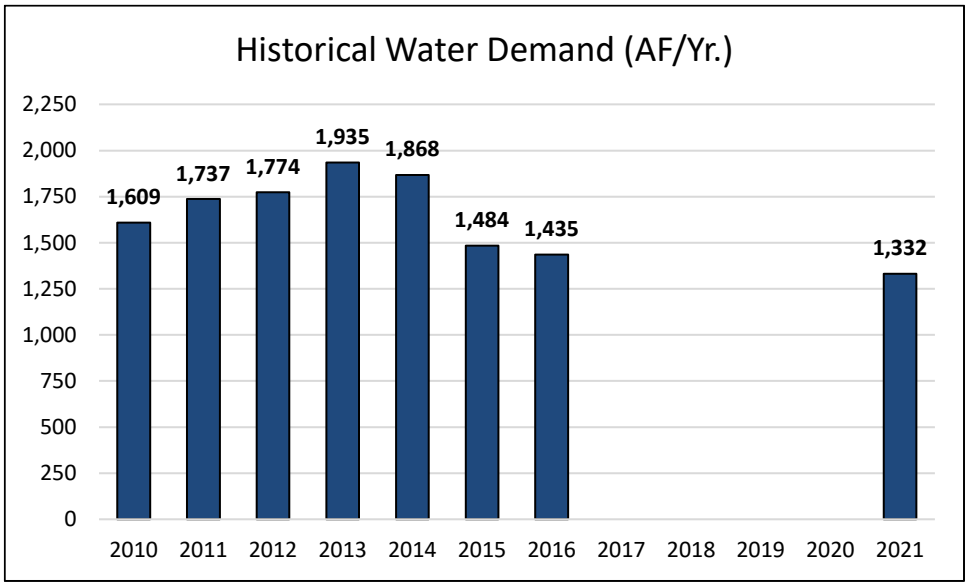
groundwater assessments, and regulatory requirements like outside agency charges. These pass-through costs will only be implemented if future increases exceed the projected costs used in the rate model. For the District to pass through these cost increases, it must specify that intention in Prop 218 notices and be noted in the rate resolution.

Water Consumption Trends

Uncertainty about the amount of water sold each year presents a challenge to how rates should be designed. The impacts of the COVID-19 restrictions on water consumption in the District over the last few years is a concern, as well as whether those impacts will continue, consumption patterns will return to "normal," or there will be new trends developing. There is also the question of how much "drought-hardening" has taken place, where customers have made permanent changes in their consumption patterns, such as installing low-water landscaping and appliances.

Figure 3 indicates that, while the annual average water demand for 2010 through 2016 was 1,691, the most recent demand is approximately 1,332 acre-feet. A greater conservation mind-set among all California water users, we have assumed a five-percent conservation of this 1,300 acre-feet is the average demand going forward.

FIGURE 3. TOTAL ANNUAL DISTRICT WATER DEMAND



The next section discusses the water study in further detail.

Section 3. DEVELOPING RECOMMENDED WATER RATES

Overview: Developing the Recommended Water Rates

The following are the basic tasks included in the cost-of-service and rate design analyses:

- **Developing Revenue Requirements:** The water revenue requirements were projected based on the 2023 annual budget and input from District staff. The District Board's decision was to fund 100 percent of the District's adopted CIP program plus the new administration building. If no rate increases were adopted, less than 25 percent of the CIP program could be funded and the District would not be able to build the new admin building.
- **Developing Cost Allocations:** The cost-of-service study used these projected water revenue requirements to "functionalize" them into categories: (1) fixed capacity costs; (2) variable (or volume-based) costs; (3) customer service costs; (4) fire protection costs; and (5) zonal pumping costs. Each of these functional costs has a distinct allocation factor used to determine revenue requirements by customer class.
- **Determining Revenue Requirements by Customer Class:** Revenue requirements for each customer class were then determined based on allocation factors such as water consumption, capacity peaking factors, and number of accounts by meter size. For example, volume-related costs are allocated based on the annual water consumption for each class; fixed/capacity related costs are allocated based on peaking factors; customer costs are allocated based on number of accounts in each customer class; and zonal pumping costs are allocated on the basis of amount pumped and the elevation changes for each elevation zone.
- **Evaluating Rate Design and Fixed vs. Variable Costs:** Evaluating rate-design alternatives includes how much revenue is collected from fixed charges versus variable rates. Industry practices provide flexibility regarding the actual percentages collected from fixed vs. variable rates, and the District has decided to use a rate design that results in rates that are comparable to the current rates. This proposed rate design collects 54 percent from volumetric rates and the remaining 46 percent is collected from fixed charges.

  There are two tiers for residential customers and a uniform tier for commercial/industrial/ multi-family and public authority/irrigation customers. The District also decided to retain separate volumetric rates for the five elevation zones, which reflect the higher pumping costs of these zones. This rate study also developed proposed rates under an alternative rate structure that collects 40 percent of rate revenue from fixed charges and 60 percent from volumetric rates. The proposed rate design alternative is the 46 percent Fixed/54 percent Volumetric alternative.
- **Evaluating Financial Plan/CIP Alternatives:** As previously shown in Figure 1, NBS evaluated several alternatives for rate increase and CIP costs, and the District selected the alternative that funds 100% percent of the District's CIP program and the new administration building.
- **Drought and Water Conservation:** Beginning in June 2016, communities were allowed to "self-certify" that they had sufficient supply to meet customer demand for three years but were no longer mandated to achieve a specific conservation target. Today, the District continues to ask customers to conserve, and while the level of conservation the District is achieving is beneficial from a supply standpoint, placing a priority on conservation creates financial risks for the utility.

To help offset this risk, the drought rates proposed in this study account for various stages of water conservation to allow the District to continue meeting its financial obligations during times of significant conservation. These drought rates were developed to align with the State Water Resources Control Board Water Shortage Contingency Plan Shortage Level, which requires the Board to act to implement the drought/conservation rates.

- **Meeting Operating Costs:** For Fiscal Years 2023 through 2027, the net revenue requirements (total revenue requirements less non-rate revenues) are projected to vary from year-to-year but increase moderately, beginning at $2.5 million in 2023, peaking at almost $3.0 million in 2027. If the District did not implement any water rate increases over this period, there would be insufficient revenue to fund operations and capital projects (assuming CIP is still funded at 100 percent and includes the Admin building). More importantly, the District cash reserves would be negative at the end of the 5-year rate period.
- **Maintaining Reserve Funds:** It is important for public water utilities to maintain reasonable reserves to handle emergencies, fund working capital, maintain a good credit rating, and generally follow sound financial management practices. Rate increases typically consider the need to meet various reserve-related objectives. The District has established the following reserve targets:
  - **Working Capital Reserves** – Year-end target reserve is based on 90 days of operating expenses, which amount to $1.2 million in 2023 and increases to almost $1.4 million. This reserve addresses risks of normal cash-flow fluctuations, non-payments, and other unexpected cashflow issues.
  - **Capital Improvement Reserves** – Year-end target reserve is based on 10 percent of the District's net assets, meaning capital assets net of depreciation and less non-depreciable assets (such as land). The District's total capital assets in 2023 were $16.6 million, less non-depreciable assets of $3.7 million, leaving $12.8 million as the basis for the 10-percent. This amounts to $1.28 million in 2023, gradually increasing to $1.6 million by 2027.
  - **Rate Stabilization Reserves –** To address the concern that fluctuations in rate revenues due to normal cashflow variations, weather-related changes in water sold, and emergencies that occasionally affect revenues, the District has a rate stabilization reserve. The target reserve level is based on the higher of 50 percent of the costs of purchased/leased water or 45 days of water sales revenue; the target reserve level is $414,000 in 2023, reaching $480,000 by 2027.
  - **Emergency/Disaster Reserves –** This is a special reserve for emergencies target based on one percent of net assets. This is $128,500 in 2023 but grows to $160,000 in 2027.

If rate increases are not implemented, reserves will drop below the sustainable levels and the ending cash reserves would decline from $2.5 million in 2023 and be negative by the end of the five-year period. Therefore, annual rate increases are necessary to maintain sufficient reserves.

Modifications to Rate Structure

The changes to the District's water rate structure in 2018 included the implementation of separate rates for new customer classes and adjusting the breakpoint for the Tier 1 rates. Both changes were based on the water use data and estimates of indoor water usage. The 2018 rate study also proposed collection 68 percent of rate revenue from volumetric rates and 32 percent from fixed charges.[6] The proposed rates in

[6] *See Table 5-2, Section 5.2 – Proposed Rate Structure in the District's 2018 rate study by Raftelis.*

NBS' rate design adjust the share of revenue collected from variable charges from 68 percent to 54 percent and adjusts the share of revenue collected from fixed charges from 32 percent to 46 percent. The proposed rate design continues with two tiers at the same breakpoint for residential customers of 20 hundred cubic feet (HCF), uniform rates for commercial, industrial & multi-family customers and public authority & irrigation customers, and zonal rates for each of five elevation zones.

Water Utility Revenue Requirements

Figure 4 summarizes the sources and uses of funds and net revenue requirements for the next five years and includes the recommended annual rate increases**.** Figure 5 summarizes the projected reserve fund balances and reserve targets. A summary of the District's proposed 10-year financial plan, which is included in Appendix C – Water Rate Study Summary Table, includes revenue requirements, reserve funds, revenue sources, proposed rate increases, and the District's capital improvement program.

FIGURE 4. FINANCIAL PLAN - SUMMARY OF WATER REVENUE REQUIREMENTS

Summary of Sources and Uses of Funds and Net Revenue Requirements	Budget	Projected				
	2023	2023	2024	2025	2026	2027
Sources of Water Funds						
Rate Revenue Under Prevailing Rates	$ 2,756,700	$ 2,756,700	$ 2,756,700	$ 2,756,700	$ 2,756,700	$ 2,756,700
Non-Rate Revenues	2,499,782	2,569,516	2,613,504	2,658,373	2,704,138	2,750,819
Total Sources of Funds	**$ 5,256,482**	**$ 5,326,216**	**$ 5,370,204**	**$ 5,415,073**	**$ 5,460,838**	**$ 5,507,519**
Uses of Water Funds						
Operating Expenses	$ 4,571,955	$ 4,876,874	$ 5,029,209	$ 5,186,985	$ 5,350,418	$ 5,519,737
Debt Service	198,460	198,459	198,460	198,460	198,459	198,459
Rate-Funded Capital Expenses	687,400	-	-	-	-	-
Total Use of Funds	**$ 5,457,815**	**$ 5,075,333**	**$ 5,227,669**	**$ 5,385,445**	**$ 5,548,877**	**$ 5,718,196**
Surplus (Deficiency) before Rate Increase	**$ (201,333)**	**$ 250,883**	**$ 142,535**	**$ 29,628**	**$ (88,039)**	**$ (210,677)**
Additional Revenue from Rate Increases	-	165,402	608,679	1,012,525	1,406,737	1,823,081
Surplus (Deficiency) after Rate Increase	**$ (201,333)**	**$ 416,285**	**$ 751,214**	**$ 1,042,153**	**$ 1,318,698**	**$ 1,612,404**
Projected Annual Rate Increase [1]	***0.00%***	***12.00%***	***12.00%***	***12.00%***	***10.00%***	***10.00%***
Debt Coverage Ratio	*(0.01)*	*3.10*	*4.79*	*6.25*	*7.64*	*9.12*
Net Revenue Requirement [2]	**$ 2,958,033**	**$ 2,505,817**	**$ 2,614,165**	**$ 2,727,072**	**$ 2,844,739**	**$ 2,967,377**

1. Revenue from rate increases are implemented on January 1, 2024, so the District will collect 6 months

2. Total Use of Funds less non-rate revenues and interest earnings. This is the annual amount needed from water rates.

FIGURE 5. SUMMARY OF WATER RESERVE FUNDS

Beginning Reserve Fund Balances and Recommended Reserve Targets	Budget	Projected				
	2023	2023	2024	2025	2026	2027
Working Capital Reserve	$ 898,667	$ 1,219,000	$ 1,257,000	$ 1,297,000	$ 1,338,000	$ 1,380,000
Recommended Minimum Target	*1,143,000*	*1,219,000*	*1,257,000*	*1,297,000*	*1,338,000*	*1,380,000*
Capital Improvement Reserve	$ 1,285,500	$ 1,040,897	$ (84,958)	$ (81,012)	$ 371,126	$ 1,665,043
Recommended Minimum Target	*1,285,500*	*1,403,600*	*1,539,900*	*1,590,500*	*1,622,900*	*1,601,000*
Rate Stabilization Fund Reserve	$ 200,000	$ 202,578	$ 205,189	$ 207,834	$ 210,513	$ 213,227
Recommended Minimum Target	*414,000*	*427,000*	*440,000*	*453,000*	*466,000*	*480,000*
Emergency/Disaster Reserve	$ 120,000	$ 121,547	$ 123,114	$ 124,700	$ 126,308	$ 127,936
Recommended Minimum Target	*128,500*	*140,400*	*154,000*	*159,100*	*162,300*	*160,100*
Total Ending Balance	**$ 2,504,167**	**$ 2,584,022**	**$ 1,500,344**	**$ 1,548,523**	**$ 2,045,947**	**$ 3,386,206**
Total Recommended Minimum Target	***$ 2,971,000***	***$ 3,190,000***	***$ 3,390,900***	***$ 3,499,600***	***$ 3,589,200***	***$ 3,621,100***

The rate model developed for this rate study includes mechanisms that can be used to adjust the financial plan going forward: (1) If *grant funding* becomes available, that funding can be included in the capital project funding calculations to reduce the amount of CIP costs that are funded through rates. (2) Although the District Board has not directed staff to implement a *low-income assistance program*, unrestricted

revenues could be used to fund such a program. This would entail establishing the annual amount committed to this program, creating an applicant form and process, and placing qualified customers into the billing system, thereby reducing their water bills.

Customer Class Cost Allocation Factors

Three cost-of-service factors are used to allocate revenue requirements to each customer class, including:

- **Water consumption** (see Figure 6) – which allocates variable (or commodity) costs.
- **Peaking factors**, or the percentages of system peak demands, (see Figure 7) – which allocates capacity-related costs based on peaking factors[7].
- **Number of accounts** (see Figure 8) – which allocates customer-related costs.

These factors tend to change over time and are one of the primary reasons that rates change between customer classes when a new cost-of-service rate study is prepared.

FIGURE 6. WATER CONSUMPTION BY CUSTOMER CLASS

Customer Class	2022 Volume (hcf)[1]	Conservation Factor	Adjusted Volume (hcf/Yr.)	Percent of Total Volume
Single Family	255,200	5.0%	242,440	**44.0%**
Apartment	70,754	5.0%	67,216	**12.2%**
Commercial	84,568	5.0%	80,340	**14.6%**
Industrial	33,978	5.0%	32,279	**5.9%**
Irrigation	96,284	5.0%	91,470	**16.6%**
Public Authority	39,384	5.0%	37,415	**6.8%**
Fire Meters	57	5.0%	54	**0.0%**
Grand Total	**580,225**	--	**551,214**	**100.0%**

1. Source: *Data summarized with Pivot tables in source files: Apartment Billing Data_jt.xlsx, Commercial Billing Data_jt.xlsx, Industrial Billing Data_jt.xlsx, Irrigation Billing Data_jt.xlsx, Public Authority Billing Data_jt.xlsx, Residential Billing Data_jt.xlsx'*

FIGURE 7. PEAKING FACTORS BY CUSTOMER CLASS

Customer Class	Average Monthly Use (hcf)	Peak Monthly Use (hcf)[1]	Peak Month Factor	Max Month Capacity Factor
Single Family	42,533	48,359	**1.14**	**41.8%**
Apartment	11,792	14,036	**1.19**	**12.1%**
Commercial	14,095	15,534	**1.10**	**13.4%**
Industrial	5,663	5,827	**1.03**	**5.0%**
Irrigation	16,047	21,761	**1.36**	**18.8%**
Public Authority	6,564	10,141	**1.54**	**8.8%**
Fire Meters	10	40	**4.21**	**0.0%**
Grand Total	**96,704**	**115,698**	**1.20**	**100.0%**

[7] *Peaking factors are peak month consumption divided by 12-month average monthly consumption. While peak day data is preferred, this data is not available by customer class and is rarely available for most water agencies in our experience.*

FIGURE 8. NUMBER OF ACCOUNTS BY CUSTOMER CLASS

Customer Class	Number of Meters[1]	Percent of Total
Single Family	2,031	**80.1%**
Apartment	54	**2.1%**
Commercial	284	**11.2%**
Industrial	11	**0.4%**
Irrigation	94	**3.7%**
Public Authority	31	**1.22%**
Fire Meters	32	**1.26%**
Grand Total	**2,537**	**100.0%**

1. Number of meters is from source: *Apartment Billing Data_jt.xlsx, Commercial Billing Data_jt.xlsx, Industrial Billing Data_jt.xlsx, Irrigation Billing Data_jt.xlsx, Public Authority Billing Data_jt.xlsx, Residential Billing Data_jt.xlsx*

Cost of Service Analysis

The revenue requirements previously shown in Figure 4 are distributed in the cost-of-service analysis to each component of the water rate structure by allocating costs through the functionalization and classification process.

Functionalization and Classification

Most costs are not typically allocated just to fixed or variable categories and, therefore, can be allocated to multiple functions of water service. Those costs are then classified for the purpose of allocating costs to the following five cost causation components:

- ***Commodity*** related costs are those costs associated with the total consumption of water over a specified period (e.g., annual).
- ***Capacity*** related costs are those costs associated with the maximum demand required or the maximum size of facilities required to meet this demand.
- ***Customer*** related costs are those costs associated with having a customer on the water system, such as meter reading, postage, and billing.
- ***Fire Protection*** costs are those costs associated with providing sufficient capacity in the system for fire meters and other operating and maintenance costs of providing water to properties for private fire service protection.
- ***Zonal Pumping Costs*** are energy costs for pumping to each of five consecutive elevation zones.

Figure 9 summarizes the results of this functional allocation process.

FIGURE 9. REVENUE REQUIREMENTS BY FUNCTIONAL CATEGORY

Total Rev. Reqts. Including Rate Increases	Commodity	Capacity	Customer	Fire Protection	Zonal
$ 3,087,504	$ 1,667,252	$ 742,809	$ 233,748	$ 82,362	$ 121,646
100.0%	**54.0%**	28.9%	9.1%	3.2%	4.7%

Allocations to Customer Classes

Once costs have been organized in the District's functional categories, they are then allocated to the cost causation components and used to establish new water rates in the form of fixed and variable charges. The following is a description of this analysis.

Fixed costs generally consist of costs that a utility incurs to serve customers irrespective of the amount of water they use. These include: (1) infrastructure (capacity-related facilities) required to provide service to customers; (2) costs associated with the peaking requirements, or maximum demand which affects the maximum size of the water supply system, treatment and delivery system, operations, and maintenance costs; and (3) administrative and billing costs associated with meter reading, postage, and billing.

Variable costs are those that change as the volume of water produced and delivered changes. These commonly include the costs for groundwater replenishment, groundwater pumping, chemicals used in the treatment process, energy related to pumping for transmission and distribution, and source of supply. Zonal costs are directly allocated to volumetric rates and used to determine the additional costs (or surcharges) associated with pumping costs to each of the five elevation zones. We note that not all customer classes have water deliveries within each zone and as seen in the proposed rate schedule, therefore do not have volumetric rates for each zone.

Collecting Fixed vs. Variable Costs – Ideally, all fixed costs would be recovered from fixed charges and all variable costs would be recovered from volumetric charges. When this is the case, fluctuations in water sales revenues would be directly offset by reductions or increases in variable expenses, which provides greater revenue stability for the utility. However, water conservation goals as well as ease of understanding, ease of administration, and customer bill impacts are also considered.[8] Further, revenue losses resulting from decreased consumption can be mitigated by developing drought rates and/or revenue stabilization rates, both of which were developed in this study.

The net revenue requirements previously identified in Figure 4 are allocated to each customer class using the allocation factors shown above in Figures 6 through 8. The results of this cost-allocation process are summarized in Figure 10 and Figure 11. The functional costs for both rate design alternatives (i.e., the 46 percent Fixed/65 percent Variable and the 40 percent Fixed/60 percent Variable) are shown in Figure 10, whereas Figure 14 shows how these costs are allocated to each customer class.[9]

FIGURE 10. SUMMARY OF REVENUE REQUIREMENTS BY FUNCTIONAL CATEGORY (FY 2023)

Classification Components	Current Rate Structure 46% Fixed/54% Variable Net Revenue Requirements		Alternative Rate Structure 40% Fixed/60% Variable	
Commodity-Related Costs	$ 1,667,252	*54.0%*	$ 1,706,159	*55.3%*
Zonal-Related Costs	$ 146,343	*4.7%*	$ 146,343	*4.7%*
Total Variable Costs	**$ 1,813,595**	*58.7%*	**$ 1,852,502**	*60.0%*
Capacity-Related Costs (Fixed)	$ 893,620	*28.9%*	$ 854,712	*27.7%*
Customer-Related Costs	$ 281,206	*9.1%*	$ 281,206	*9.1%*
Total Fixed Costs	**$ 1,174,825**	*38.1%*	**$ 1,135,918**	*36.8%*
Fire Protection-Related Costs	$ 99,084	*3.2%*	$ 99,084	*3.2%*
Total Fixed Costs	**$ 1,273,909**	*41.3%*	**$ 1,235,002**	*40.0%*
Subtotal Revenue Requirement	**$ 3,087,504**	**100%**	**$ 3,087,504**	**100%**

[8] *Principles of Water Rates, Fees,* and Charges, *Manual of Water Supply Practices*, M1 Manual, AWWA, Seventh Edition, 2017, pp. 6 and 96.

[9] *Appendix D shows how fixed and variable costs are allocated in more detail.*

FIGURE 11. SUMMARY OF REVENUE REQUIREMENTS BY CUSTOMER CLASS (FY 2023)

Proposed Rate Structure (46% Fixed / 54% Variable)							
Customer Class	Cost Classification Components					Cost of Service Net Revenue Reqts	% of COS Net Revenue Reqts
	Commodity	Capacity (Fixed)	Customer	Fire Protection	Zonal		
Single Family	$ 733,306	$ 373,512	$ 225,120	$ -	$ 64,366	$ 1,396,304	45%
Apartment	$ 203,309	$ 108,410	$ 5,985	$ -	$ 17,845	$ 335,550	11%
Commercial	$ 243,003	$ 119,980	$ 31,479	$ -	$ 21,330	$ 415,792	13%
Industrial	$ 97,634	$ 45,006	$ 1,219	$ -	$ 8,570	$ 152,430	5%
Irrigation	$ 276,668	$ 168,076	$ 10,419	$ -	$ 24,285	$ 479,448	16%
Public Authority	$ 113,168	$ 78,326	$ 3,436	$ -	$ 9,933	$ 204,864	7%
Fire	$ 163.79	$ 309	$ 3,547	$ 99,084	$ -	$ 103,103	3%
Grand Total	**$ 1,667,252**	**$ 893,620**	**$ 281,206**	**$ 99,084**	**$ 146,329**	**$ 3,087,490**	**100%**
% of Costs by Classification	*54%*	*29%*	*9%*	*3%*	*5%*	*100%*	

Calculation of Proposed Water Rates

The following is a summary of how fixed charges and volumetric rates were calculated. Only the preferred/proposed rate design (46 percent Fixed/54 percent Variable) alternative is shown below. Calculations for the 40 percent Fixed/60 percent Variable alternative have slightly different results.

Fixed Charges: Figure 12 summarizes the number of meters and equivalent meters by customer class and meter size. Equivalent meters are the basis for calculating fixed monthly capacity-related charges, while the number of meters is used to calculate customer-related charges. Figure 13 shows the calculation of these fixed capacity-related and customer-related charges by meter size and customer class and Figure 14 shows the calculated fixed charges for Fire Meters.

FIGURE 12. SUMMARY OF METERS BY CUSTOMER CLASS (CY 2022)

Number of Meters by Class and Size[1]	2023											Total
	5/8 inch	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	12 inch	
Single Family	1,325	577	128	1	-	-	-	-	-	-	-	2,031
Apartment	14	18	9	6	5	-	1	1	-	-	-	54
Commercial	98	66	60	11	42	1	5	1	-	-	-	284
Industrial	2	-	1	1	2	-	1	1	3	-	-	11
Irrigation	8	8	25	2	43	1	2	-	3	2	-	94
Public Authority	6	2	4	-	11	-	4	2	2	-	-	31
Fire Meters	-	-	-	-	-	-	5	3	18	4	2	32
Total Meters/Accounts	**1,453**	**671**	**227**	**21**	**103**	**2**	**18**	**8**	**26**	**6**	**2**	**2,537**

FIGURE 13. FIXED CHARGE CALCULATIONS BY CUSTOMER CLASS (FY 2023)

Proposed Rate Structure (46% Fixed / 54% Variable)

Number of Meters by Class and Size[1]	2023											Total
	5/8 inch	3/4 inch	1 inch	1.5 inch	2 inch	3 inch	4 inch	6 inch	8 inch	10 inch	12 inch	
All Customers (Except Fire Meters)	1,453	671	227	21	103	2	13	5	8	2	-	2,505
Hydraulic Capacity Factor[2]	*1.00*	*1.50*	*2.50*	*5.00*	*8.00*	*16.00*	*25.00*	*50.00*	*80.00*	*120.00*	*168.75*	
Total Equivalent Meters	**1,453**	**1,007**	**568**	**105**	**824**	**32**	**325**	**250**	**640**	**240**	**-**	**5,443**
Bi-Monthly Fixed Service Charges												
Customer Costs ($/Acct/mo.)[3]	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	
Capacity Costs ($/Acct/mo.)[4]	$ 27.36	$ 41.04	$ 68.41	$ 136.81	$ 218.90	$ 437.81	$ 684.07	$ 1,368.15	$2,189.04	$ 3,283.56	$4,617.50	
Total Bi-Monthly Meter Charge	**$ 45.84**	**$ 59.52**	**$ 86.88**	**$ 155.29**	**$ 237.38**	**$ 456.28**	**$ 702.55**	**$ 1,386.62**	**$2,207.51**	**$ 3,302.03**	**$4,635.97**	
Annual Fixed Costs Allocated to Bi-Monthly Meter Charges												
Customer Costs	$ 277,659											
Capacity Costs	$ 893,620											
Total Fixed Meter Costs	$ 1,171,278											
Annual Revenue from Monthly Bi-Meter Charges												
Customer Charges	$ 161,053	$ 74,375	$ 25,161	$ 2,328	$ 11,417	$ 222	$ 1,441	$ 554	$ 887	$ 222	$ -	**$ 277,659**
Capacity Charges	238,550	165,245	93,171	17,239	135,283	5,254	53,358	41,044	105,074	39,403	-	**$ 893,620**
Total Rev. from Bi-Mo. Meter Charges	**$ 399,603**	**$ 239,620**	**$ 118,332**	**$ 19,566**	**$ 146,699**	**$ 5,475**	**$ 54,799**	**$ 41,599**	**$ 105,961**	**$ 39,624**	**$ -**	**$ 1,171,278**

1. Number of meters by size and class is per the District's utility billing data as of November 2022 in the Billed Consumption Report by Month spreadsheets.
2. Source: AWWA Manual M1, "Principles of Water Rates, Fees, and Charges", Table B-1. Assumes displacement meters for 5/8 - 2 inch meters, Compound Class I for 3 - 8 inch meters, and Turbine Class II for 10-12 inch meters.
3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.
4. Capacity costs are allocated by meter size and the hydraulic capacity of the meter.

FIGURE 14. FIXED CHARGE CALCULATIONS FOR FIRE METERS (FY 2023)

	Proposed Rate Structure (46% Fixed / 54% Variable)					
Number of Meters by Class and Size[1]	**2023**					**Total**
	4 inch	**6 inch**	**8 inch**	**10 inch**	**12 inch**	
Fire Meters	5	3	18	4	2	32
Hydraulic Capacity Factor[2]	*14.00*	*32.00*	*56.00*	*88.00*	*132.00*	
Total Equivalent Meters	**70**	**96**	**1,008**	**352**	**264**	**1,790**
Bi-Monthly Fixed Service Charges						
Customer Costs ($/Acct/mo.)[3]	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	
Fire Protection Costs ($/Acct/mo.)[4]	$ 129.16	$ 295.22	$ 516.64	$ 811.86	$1,217.79	
Total Bi-Monthly Meter Charge	**$ 147.63**	**$ 313.70**	**$ 535.11**	**$ 830.33**	**$1,236.26**	
Annual Fixed Costs Allocated to Bi-Monthly Meter Charges						
Customer Costs	$ 3,547					
Fire Protection Costs	$ 99,084					
Total Fixed Meter Costs	$ 102,631					
Annual Revenue from Monthly Bi-Meter Charges						
Customer Charges	$ 554	$ 333	$ 1,995	$ 443	$ 222	**$ 3,547**
Fire Protection Costs	3,875	5,314	55,797	19,485	14,613	**99,084**
Total Revenue from Bi-Mo. Meter Charges	**$ 4,429**	**$ 5,647**	**$ 57,792**	**$ 19,928**	**$ 14,835**	**$ 102,631**

1. Number of meters by size is from the District's 2019 rate study and assumes the number of meters has not changed.
2. Source: AWWA Manual M6, "Water Meters - Selection, Installation, Testing and Maintenance", Table 5-3. Assumes Displacement Meters for 5/8 - 2 inch meters and Fire Service Type I & II for 3 - 10 inch meters.
3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.
4. Fire Protection costs are allocated by meter size and the hydraulic capacity of the meter.

Volumetric Rates: Currently all residential customers have two tiers, paying per zone for 0-20 HCF with a higher rate for more than 20 HCF. Non-residential customers are classified as either commercial/industrial/ multi-family or public authority/irrigation customers with a uniform rate. Although there are costs that could be used to create tiered rates for non-residential customers, those customers have significant variations in consumption levels that would results is many customers never reaching the second tier and others having most of their volumetric charges coming from the second tier. Because of this, it would not be equitable to implement tiered rates for non-residential customers.

The calculation of the proposed two-tiered residential rates and the uniform non-residential rates both must consider the pumping costs for each elevation zone as well as the amount of water delivered within each zone.

Tiered Residential Rates: Calculating two tiers for residential customers requires identifying both the costs and the amount of water included in each tier. Figure 15 summarizes the District's two sources of supply for 2022 and indicates that about 65 percent of the supplies should be allocated to Tier 1 and 35 percent to Tier 2.

FIGURE 15. SOURCES OF SUPPLY AND TIER ALLOCATIONS

Allocation of Source of Supply to Tiers			
Source of Supply	***Annual AF[1]***	***Supply in %***	***Annual HCF[1]***
Tier 1 - Wells	850	65.4%	360,409
Tier 2 - Wells (Purchased/Leased)	450	34.6%	190,805
Total Supply	1,300	100.0%	551,214

1. District Data.

Figure 16 shows costs of each source by tier and once divided by the consumption by tier (in HCF), results in the tiered rates. The uniform rate is shown under the total column. These tiered rates do not yet include pumping costs, which are factored in below.

FIGURE 16. SOURCES OF SUPPLY AND COSTS BY TIER AND TIERED RATES

ALLOCATION OF COMMODITY COSTS BY TIER (without Zonal Costs)			46F/54V Rate Structure
Volumetric Rate Revenue Requirements	*Allocated $ and Consumption by Tier*		
	Tier 1	*Tier 2*	*Total*
Commodity-Related less Purchased/Leased	$912,908	$483,304	$1,396,212
Purchased/Leased Costs (Adjusted)	$0	$271,040	$271,040
Total Volumetric Costs (***w/o Pumping Costs***	$912,908	$754,344	$1,667,252
Residential Consumption by Tier in HCF	360,409	190,805	551,214
Tiered/Uniform Rates	**$2.53**	**$3.95**	**$3.02**

Zonal Volumetric Charges

The tiered rates in Figure 16 did not include zonal pumping costs, which require the amount of consumption occurring in each zone, which is shown in Figure 17. The total amount of pumping by zone includes the amount of pumping in lower zones to get water to the higher zones and the amount of pumping required for each zone. This is estimate using the elevation difference for each zone and, when combined with the consumption by zone shown in Figure 17, estimates the proportional share of pumping costs. This analysis is shown in Figure 18 with the zonal pumping costs shown in the bottom row.

FIGURE 17. CONSUMPTION BY ZONE

NET CONSUMPTION BY ZONE (HCF)						
Customer Class	Net Consumption by Zone and Class (hcf/yr.)					*Total Consumption*
	Zone 1	Zone 2	Zone 3	Zone 4	*Zone 5*	
Residential - Tier 1	98,580	55,490	5,490	6,047	1,254	***166,862***
Residential - Tier 2	52,190	29,377	2,907	3,201	664	***88,338***
Comm., Indust. & Multi-Family	126,606	62,694				***189,300***
Public Authority & Irrigation	111,259	20,679		3,730		***135,668***
Subtotal	**388,635**	**168,240**	**8,397**	**12,978**	**1,918**	***580,168***
% of Total	*67.0%*	*29.0%*	*1.4%*	*2.2%*	*0.3%*	*100.0%*

1. Consumption is per the District's utility billing data as of November 2022 in the Billed Consumption Report by Month spreadsheets.

FIGURE 18. ZONE ELEVATIONS AND PUMPING COSTS BY CUSTOMER CLASS AND ZONE

ZONE ELEVATIONS AND PUMPING COSTS BY CUSTOMER CLASS AND ZONE						
Customer Class	Zone 1	Zone 2	Zone 3	Zone 4	*Zone 5*	*Total Pumping "Units"*
Elevations of Zones (ft AMSL)[1]						
Low Elevation	307	378	536	453	557	
High Elevation	442	541	690	630	568	
Average Elevation	375	460	613	542	563	
Incremental Feet of Elevation Change[2]	**68**	**153**	**306**	**235**	**256**	
Total "Pumping Units" by Zone and Class (hcf/yr.)[3]						
Residential - Tier 1	11,263,154	10,412,876	2,063,793	1,417,967	320,417	**25,478,207**
Residential - Tier 2	5,962,846	5,512,699	1,092,597	750,689	169,632	**13,488,463**
Comm., Indust. & Multi-Family	12,777,750	9,560,835	0	0	0	**22,338,585**
Public Authority & Irrigation	9,157,590	3,722,373	0	874,685	0	**13,754,648**
Subtotal	**39,161,340**	**29,208,783**	**3,156,390**	**3,043,341**	**490,049**	**75,059,903**
% of "Pumping Units" by Zone	**52.2%**	**38.9%**	**4.2%**	**4.1%**	**0.7%**	**100.0%**
Pumping Costs by Zone[4]	**$76,345**	**$56,942**	**$6,153**	**$5,933**	**$955**	**$146,329**

1. Source: 2017 Urban Water Management Plan.
2. Difference between the Average Elevation and the Low Elevation of Zone 1.
3. "Total Pumping by Zone" times "Incremental Feet in Elevation Change".
4. Percentage of Pumping Units by Zone times pumping costs.

Using the pumping costs by zone from Figure 18 and the consumption by zone from Figure 17, the zonal volumetric rates are shown in Figure 19. When added to the volumetric rates (without pumping costs), the zonal volumetric rates including pumping costs can be determined. These results are also summarized in Figure 19.

FIGURE 19. INCREMENTAL ZONAL PUMPING COSTS AND VOLUMETRIC RATES

ESTIMATED ZONAL PUMPING COSTS AND ZONE RATES BY CUSTOMER CLASS						
Customer Class	Pumping and Costs by Zone and Zonal Volumetric Rates					*Total Pumping Costs*
	Zone 1	Zone 2	Zone 3	Zone 4	*Zone 5*	
Pumping Costs ($)	***$76,345***	***$56,942***	***$6,153***	***$5,933***	***$955***	***$146,329***
Net Pumping by Zone (hcf/yr.)	**388,635**	**168,240**	**8,397**	**12,978**	**1,918**	**580,168**
Zonal Volumetric Rates ($/hcf)	**$0.20**	**$0.34**	**$0.73**	**$0.46**	**$0.50**	
46F/54V Rate Structure						
Customer Class	*Volumetric Rates*	Volumetric Rates by Zone and Class (hcf/yr.)				
		Zone 1	Zone 2	Zone 3	Zone 4	*Zone 5*
Residential - Tier 1	***$2.53***	*$2.73*	*$2.87*	*$3.27*	*$2.99*	*$3.03*
Residential - Tier 2	***$3.95***	*$4.15*	*$4.29*	*$4.69*	*$4.41*	*$4.45*
Comm., Indust. & Multi-Family	***$3.02***	*$3.22*	*$3.36*	*$0.00*	*$0.00*	*$0.00*
Public Authority & Irrigation	***$3.02***	*$3.22*	*$3.36*	*$0.00*	*$3.48*	*$0.00*

Proposed Water Rates

The fixed charges were shown in Figure 13 and 14 while the volumetric rates, including zonal pumping costs, were shown in Figure 19. The proposed rates for 2023 through 2027 are summarized in Figure 20.

FIGURE 20. CURRENT AND PROPOSED WATER RATES 2023 – 2027

Water Rate Schedule	Current Rates	Proposed Water Rates				
		2023	2024	2025	2026	2027
Fixed Service Charges	**Monthly Rates**					
Single- and Multi-Family Residential:						
5/8 inch	$40.97	$45.84	$51.34	$57.50	$63.25	$69.57
3/4 inch	$52.94	$59.52	$66.66	$74.66	$82.13	$90.34
1 inch	$76.88	$86.88	$97.31	$108.98	$119.88	$131.87
1.5 inch	$136.73	$155.29	$173.92	$194.79	$214.27	$235.70
2 inch	$208.56	$237.38	$265.86	$297.77	$327.54	$360.30
3 inch	$400.08	$456.28	$511.03	$572.36	$629.59	$692.55
4 inch	$615.54	$702.55	$786.85	$881.28	$969.40	$1,066.34
6 inch	$1,214.04	$1,386.62	$1,553.02	$1,739.38	$1,913.32	$2,104.65
8 inch	$1,932.25	$2,207.51	$2,472.41	$2,769.10	$3,046.01	$3,350.61
Tiered Volumetric Charges (Residential - Tier 1, 0-20 hcf)						
Zone 1	$2.33	$2.73	$3.06	$3.42	$3.77	$4.14
Zone 2	$2.59	$2.87	$3.22	$3.60	$3.96	$4.36
Zone 3	$2.85	$3.27	$3.66	$4.10	$4.51	$4.96
Zone 4	$2.64	$2.99	$3.35	$3.75	$4.13	$4.54
Zone 5	$2.84	$3.03	$3.39	$3.80	$4.18	$4.60
Tiered Volumetric Charges (Residential - Tier 2, 20+ hcf)						
Zone 1	$3.96	$4.15	$4.65	$5.21	$5.73	$6.30
Zone 2	$4.22	$4.29	$4.81	$5.38	$5.92	$6.51
Zone 3	$4.48	$4.69	$5.25	$5.88	$6.47	$7.11
Zone 4	$4.27	$4.41	$4.94	$5.53	$6.09	$6.69
Zone 5	$4.48	$4.45	$4.99	$5.58	$6.14	$6.76
Uniform Volumetric Charges (Commercial, Industrial & Multi-Family Customers)						
Zone 1	$2.77	$3.22	$3.61	$4.04	$4.44	$4.89
Zone 2	$3.03	$3.36	$3.77	$4.22	$4.64	$5.10
Zone 4	$3.08	n.a.	n.a.	n.a.	n.a.	n.a.
Uniform Volumetric Charges (Public Authority & Irrigation Customers)						
Zone 1	$3.06	$3.22	$3.61	$4.04	$4.44	$4.89
Zone 2	$3.32	$3.36	$3.77	$4.22	$4.64	$5.10
Zone 4	$3.37	$3.48	$3.90	$4.37	$4.80	$5.28

1. The 2024 rate increase will be effective January 1, 2024, and all subsequent rate increases will be effective on January 1st of each year.

Drought and Revenue Stabilization Rates

Drought Rates – The District is obligated to meet its annual net revenue requirements regardless of whether consumption levels decline due to conservation or other unexpected events (e.g., unseasonal weather, natural disasters, etc.). To this end, drought rates are intended to maintain the necessary level of revenues and have also taken into consideration the fact that, in these cases, some costs will also decrease.[10]

Figure 21 shows baseline consumption and consumption at each increased drought level for 2023.

FIGURE 21. PROJECTED CONSUMPTION AT BASELINE AND EACH SUCCESSIVE DROUGHT STAGE

2023 Consumption Assumptions				
Shortage Level[1]	Percent Shortage Range[2]	Potable Water Consumption (AF/yr.)	Potable Water Consumption (ccf/yr.)	Difference to Baseline (ccf)
1	**Less than 10% Conservation[3]**	**1,265**	**551,214**	**0**
2	Up to 20% Conservation	1,139	496,092	(55,121)
3	Up to 30% Conservation	1,012	440,971	(110,243)
4	Up to 40% Conservation	886	385,850	(165,364)
5	Up to 50% Conservation	759	330,728	(220,486)
6	Greater than 50% Conservation	633	275,607	(275,607)

1. State Water Resources Control Board Water Shortage Contingency Plan Shortage Level.
2. Drought levels based on the State Water Resources Control Board Drought Emergency Water Conservation.
3. This represents the baseline consumption for FY 2020/21 consumption.
   Conservation percentage for each drought stage is relative to the baseline consumption.

Figure 22 shows the expenses that are expected to decrease as consumption decreases. Figures 23-27 show the proposed drought response charge that would replace the uniform volumetric rate (shown above in the proposed volumetric rates in Figure 20) at each stage of conservation:

- Figure 23 shows drought rates for 2023
- Figure 24 shows drought rates for 2024
- Figure 25 shows drought rates for 2025
- Figure 26 shows drought rates for 2026
- Figure 27 shows drought rates for 2027

FIGURE 22. PROJECTED VARIABLE EXPENSES CONSIDERED

Expenses Directly Effected By Consumption Changes						
Fund	Description	Commodity-Related Costs				
		2024	2025	2026	2027	2028
Operating Fund	Pump Power	$ 262,500	$ 275,625	$ 289,406	$ 303,877	$ 319,070
Operating Fund	Well & Pump Maintenance	$ 61,800	$ 63,654	$ 65,564	$ 67,531	$ 69,556
Operating Fund	Purchased & Leased Water	$ 271,040	$ 279,171	$ 287,546	$ 296,172	$ 305,057
Total:		**$ 595,340**	**$ 618,450**	**$ 642,516**	**$ 667,579**	**$ 693,684**

[10] Details regarding the calculation of the drought rates can be found in Appendix B.

FIGURE 23. PROPOSED DROUGHT RATES 2023

Rate Structure: (46% Fixed/54% Volumetric)						
Conservation Goal	Water Consumption (ccf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Response Charge ($/ccf)	Uniform Commodity Rates ($/ccf)
< 10%	551,214	$ 1,667,252	$ -	$ 1,667,252	$0.00	$3.02
Up to 20%	496,092	1,667,252	(59,534)	1,607,718	$0.22	$3.24
Up to 30%	440,971	1,667,252	(119,068)	1,548,184	$0.49	$3.51
Up to 40%	385,850	1,667,252	(178,602)	1,488,650	$0.83	$3.86
Up to 50%	330,728	1,667,252	(297,670)	1,369,582	$1.12	$4.14
> 50%	275,607	1,667,252	(357,204)	1,310,048	$1.73	$4.75

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

FIGURE 24. PROPOSED DROUGHT RATES 2024

Rate Structure: (46% Fixed/54% Volumetric)						
Conservation Goal	Water Consumption (ccf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Response Charge ($/ccf)	Uniform Commodity Rates ($/ccf)
< 10%	551,214	$ 1,867,322	$ -	$ 1,867,322	$0.00	$3.39
Up to 20%	496,092	1,867,322	(61,845)	1,805,477	$0.25	$3.64
Up to 30%	440,971	1,867,322	(123,690)	1,743,632	$0.57	$3.95
Up to 40%	385,850	1,867,322	(185,535)	1,681,787	$0.97	$4.36
Up to 50%	330,728	1,867,322	(247,380)	1,619,942	$1.51	$4.90
> 50%	275,607	1,867,322	(309,225)	1,558,097	$2.27	$5.65

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

FIGURE 25. PROPOSED DROUGHT RATES 2025

Rate Structure: (46% Fixed/54% Volumetric)						
Conservation Goal	Water Consumption (ccf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Response Charge ($/ccf)	Uniform Commodity Rates ($/ccf)
< 10%	551,214	$ 2,091,401	$ -	$ 2,091,401	$0.00	$3.79
Up to 20%	496,092	2,091,401	(64,252)	2,027,149	$0.29	$4.09
Up to 30%	440,971	2,091,401	(128,503)	1,962,897	$0.66	$4.45
Up to 40%	385,850	2,091,401	(192,755)	1,898,646	$1.13	$4.92
Up to 50%	330,728	2,091,401	(257,006)	1,834,394	$1.75	$5.55
> 50%	275,607	2,091,401	(321,258)	1,770,143	$2.63	$6.42

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

FIGURE 26. PROPOSED DROUGHT RATES 2026

Rate Structure: (46% Fixed/54% Volumetric)						
Conservation Goal	Water Consumption (ccf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Response Charge ($/ccf)	Uniform Commodity Rates ($/ccf)
< 10%	551,214	$ 2,300,541	$ -	$ 2,300,541	$0.00	$4.17
Up to 20%	496,092	2,300,541	(66,758)	2,233,783	$0.33	$4.50
Up to 30%	440,971	2,300,541	(133,516)	2,167,025	$0.74	$4.91
Up to 40%	385,850	2,300,541	(200,274)	2,100,267	$1.27	$5.44
Up to 50%	330,728	2,300,541	(267,032)	2,033,509	$1.97	$6.15
> 50%	275,607	2,300,541	(333,790)	1,966,751	$2.96	$7.14

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

FIGURE 27. PROPOSED DROUGHT RATES 2027

Rate Structure: (46% Fixed/54% Volumetric)						
Conservation Goal	Water Consumption (ccf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Response Charge ($/ccf)	Uniform Commodity Rates ($/ccf)
< 10%	551,214	$ 2,530,595	$ -	$ 2,530,595	$0.00	$4.59
Up to 20%	496,092	2,530,595	(69,368)	2,461,226	$0.37	$4.96
Up to 30%	440,971	2,530,595	(138,737)	2,391,858	$0.83	$5.42
Up to 40%	385,850	2,530,595	(208,105)	2,322,489	$1.43	$6.02
Up to 50%	330,728	2,530,595	(277,474)	2,253,121	$2.22	$6.81
> 50%	275,607	2,530,595	(346,842)	2,183,753	$3.33	$7.92

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

Comparison of Current and Proposed Bi-Monthly Bills

SINGLE-FAMILY CUSTOMERS

Figure 28 compares bi-monthly water bills under the current and proposed rates for single-family customers for a 5/8" inch meter – the most common meter size, in 2023, along with the bills for the rate design alternative (i.e., 40 percent Fixed/60 percent Variable). Figure 29 shows the project bi-monthly residential bills for the projected 5-year rate adoption period.

FIGURE 28. BI-MO. WATER BILL COMPARISON FOR SINGLE-FAMILY CUSTOMERS - FY 2023

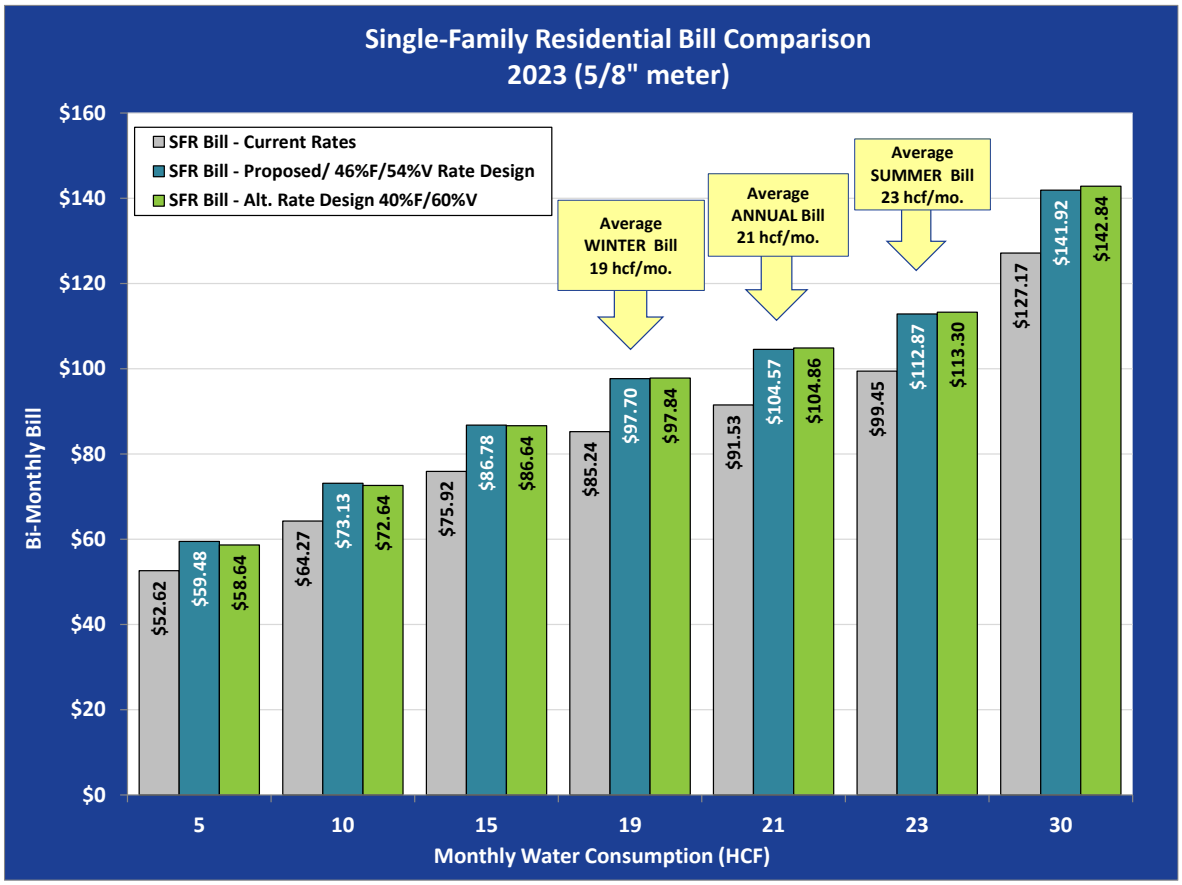
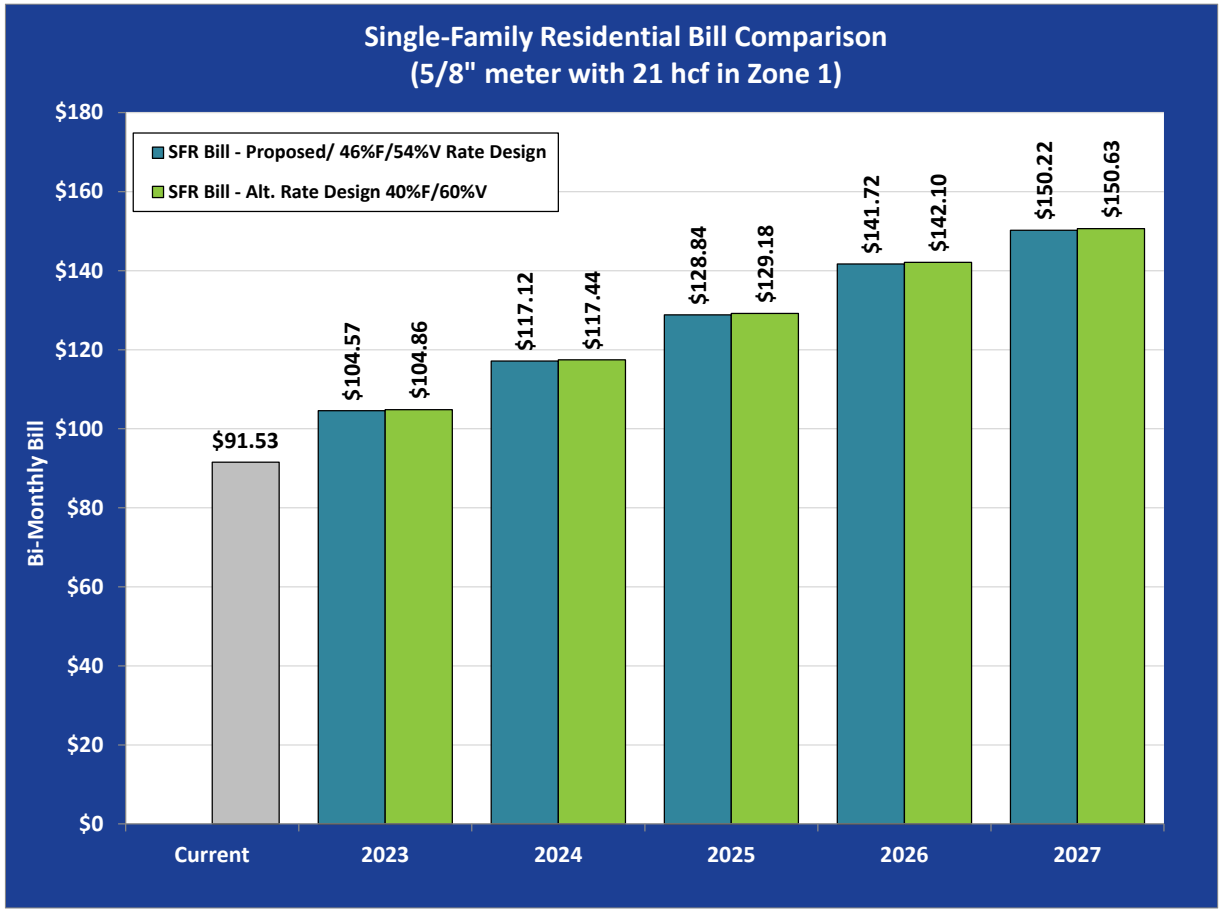


FIGURE 29. BI-MO. BILL COMPARISON FOR SINGLE-FAMILY RESIDENTIAL CUSTOMERS (2023 – 2027)



COMMERCIAL CUSTOMERS

The District is largely residential (80 percent), with approximately 11 percent in the commercial class and 9 percent in the other customer classes. Figure 30 compares bi-monthly water bills in 2023 under the current and proposed rates for commercial customers with a 1" meter in Zone 1. Figure 31 shows the project bi-monthly commercial bills for the projected 5-year rate adoption period.

FIGURE 30. BI-MO. BILL COMPARISON FOR COMMERCIAL CUSTOMERS 2023

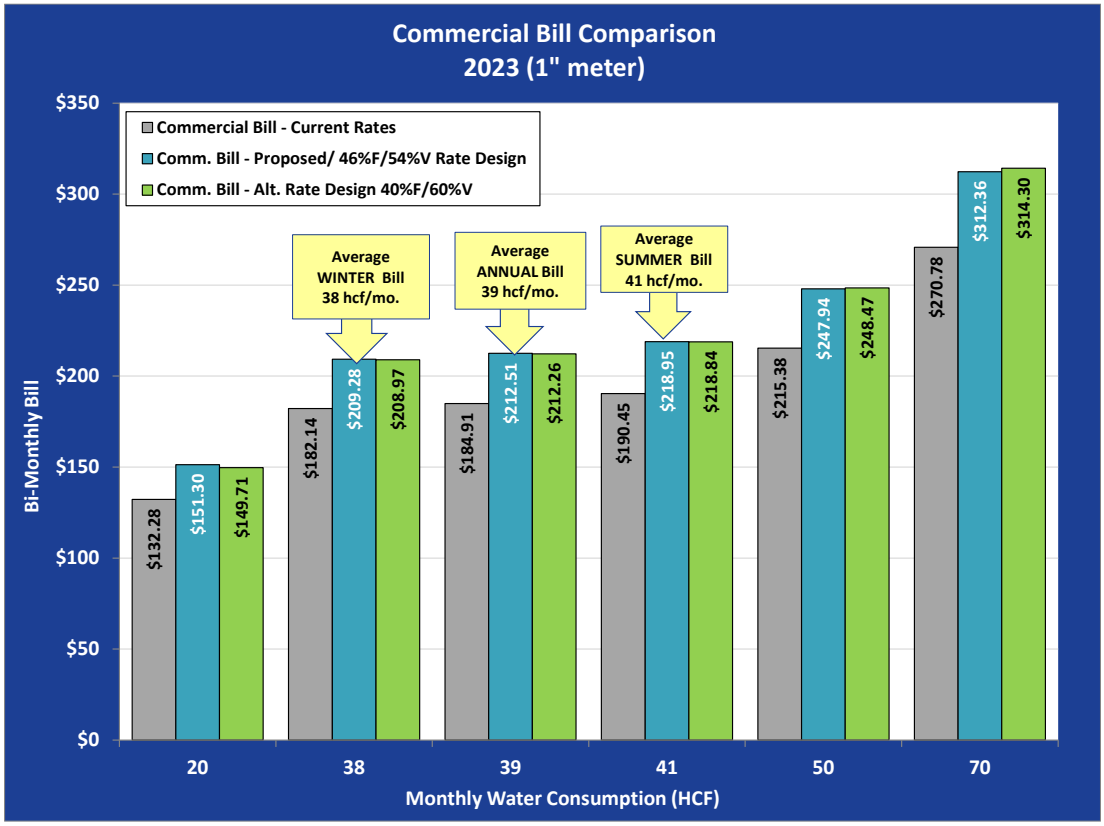
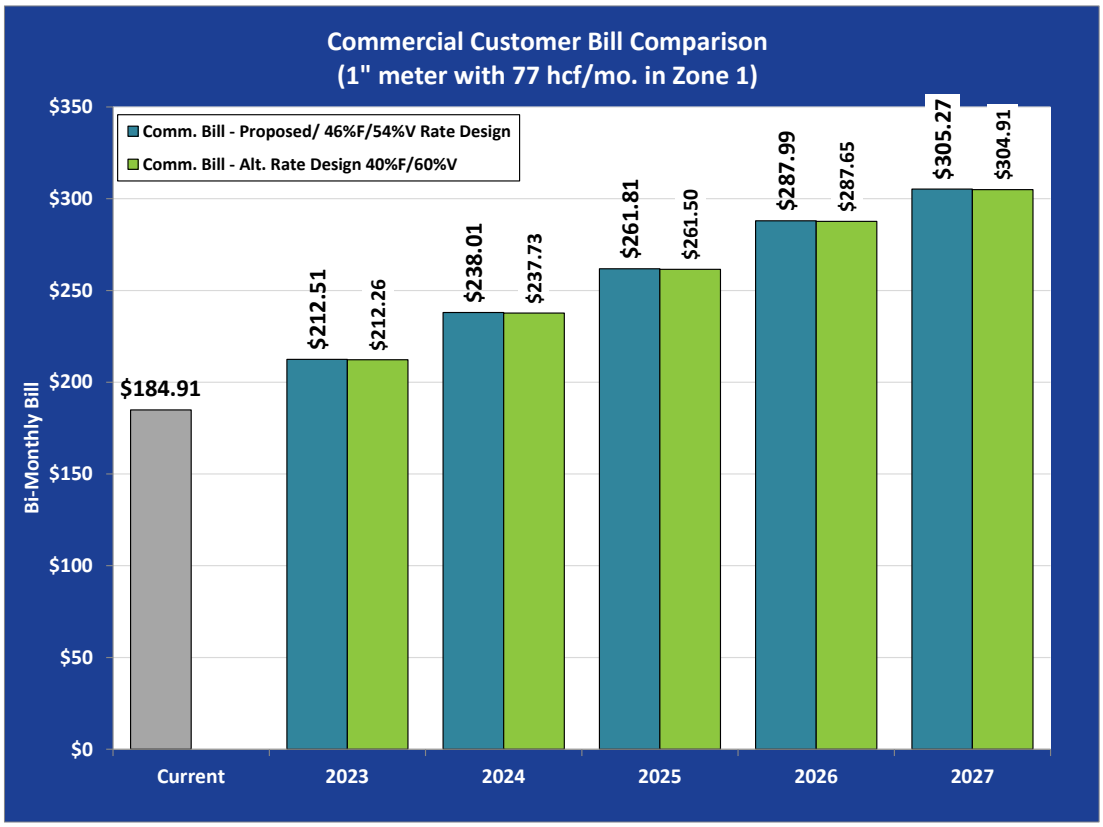


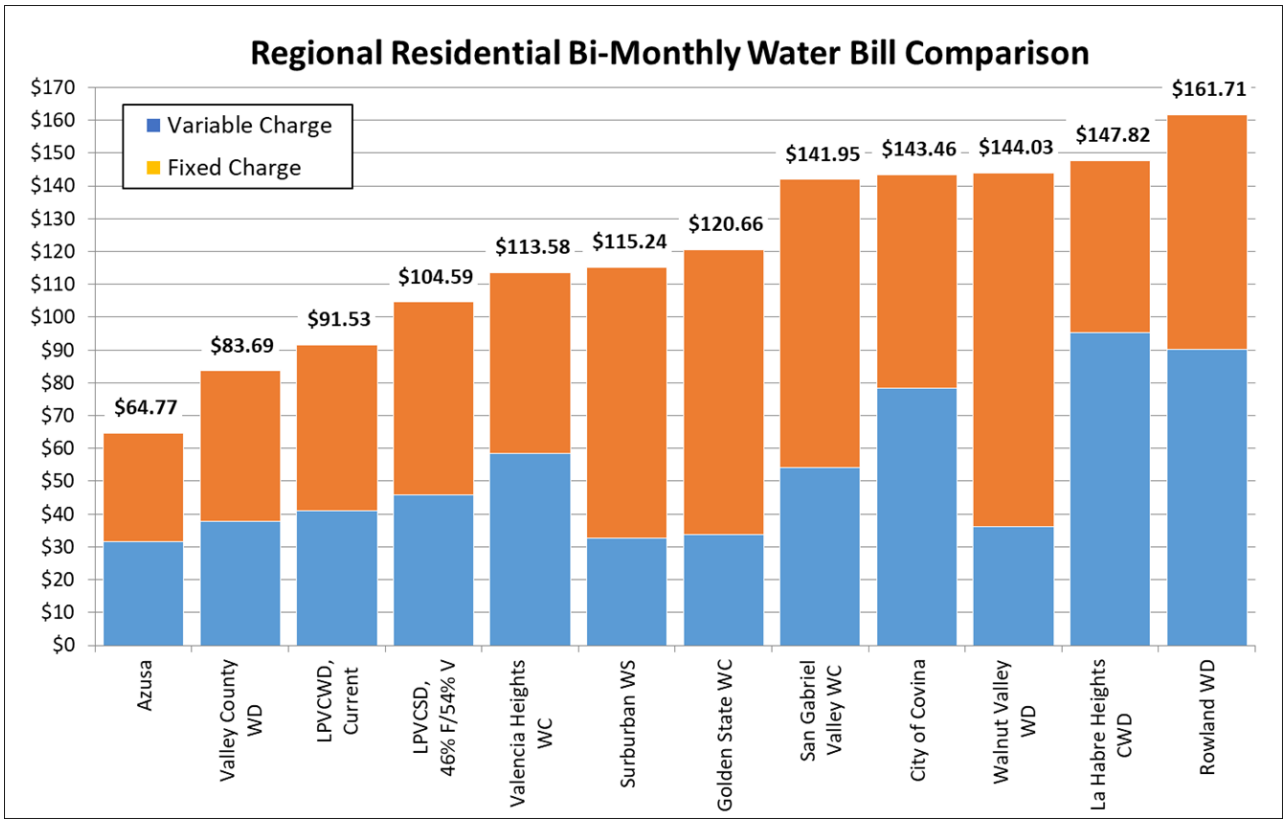
FIGURE 31. BI-MO. BILL COMPARISON FOR COMMERCIAL CUSTOMERS (2023 – 2027)



REGIONAL RATE COMPARISONS

For comparison purposes, Figure 32 shows the District's current and proposed rates compared to regional agencies. The rate calculation assumes consumption of 21 hcf bi-monthly by a residential customer with a 5/8-inch water meter.

FIGURE 32. REGIONAL WATER BILL COMPARISONS FOR RESIDENTIAL CUSTOMERS 2023



Section 4. RECOMMENDATIONS AND NEXT STEPS

Consultant Recommendations

This water rate study reflects input from District staff and the District Board and is intended to comply with general industry standards and State law, and specifically the requirements of Proposition 218. NBS' recommendations include:

- Have District legal counsel review this report, the proposed rates, and the District's Prop 218 notice for compliance with State law.
- Adopt this rate study and its proposed new water rates shown in Figure 20 along with fire meter charges shown in Figure 14 and drought rates shown in Figure 23 to Figure 27.
- Direct District staff to mail Prop 218 protest ballots to each property owner/customer.
- After a minimum of 45 days, hold a public hearing and, assuming there is no successful protest (i.e., 50% plus one protest ballots submitted), consider adopting the proposed rates.

Next Steps

Annually Review Rates and Revenue: Any time an agency adopts new utility rates, particularly when facing uncertainties such as future coronavirus impacts, drought-related changes in water demand, inflation, and the costs of regulatory changes, those new rates should be closely monitored to ensure the revenue generated is sufficient. Specific assumptions about future consumption were made and should be reviewed annually, as they directly impact volumetric rate revenues.

Principal Assumptions and Considerations

In preparing this report and the recommendations included herein, NBS has relied on several principal assumptions and considerations regarding financial matters, including the District's operating budgets, capital improvement plans, customer account data, water consumption records, and other conditions and events projected to occur in the future. This information and these assumptions were provided by sources we believe to be reliable, although NBS has not independently verified this data.

While we believe NBS' use of such information and assumptions is reasonable for the purpose of this report and its recommendations, some assumptions will invariably not materialize as stated herein or may vary significantly due to unanticipated events and circumstances. Therefore, the actual results can be expected to vary from those projected to the extent that actual future conditions differ from those assumed by us or provided to us by others.

APPENDIX A – ABBREVIATIONS & ACRONYMS[11]

AAF	Average Annual Flow
AF	Acre Foot, equal to 435.6 HCF/CCF or 325,851 gallons
Alt.	Alternative
Avg.	Average
AWWA	American Water Works Association
BMP	Best Management Practice
BOD	Biochemical Oxygen Demand
CA	Customer
CAP	Capacity
CCF	Hundred Cubic Feet (same as HCF); equal to 748 gallons
CCI	Construction Cost Index
COD	Chemical Oxygen Demand
COM	Commodity
Comm.	Commercial
COS	Cost of Service
COSA	Cost of Service Analysis
CPI	Consumer Price Index
CIP	Capital Improvement Program
DU	Dwelling Unit
Excl.	Exclude
ENR	Engineering News Record
EDU	Equivalent Dwelling Unit
Exp.	Expense
FP	Fire Protection
FY	Fiscal Year (e.g., July 1st to June 30th)
FY 2020/21	July 1, 2020 through June 30, 2021
GPD	Gallons per Day
GPM	Gallons per Minute
HCF	Hundred Cubic Feet; equal to 748 gallons or 1 CCF
Ind.	Industrial
Irr.	Irrigation
Lbs.	Pounds
MFR	Multi-Family Residential
MGD	Million Gallons per Day
Mo.	Month
Muni.	Municipal
NPV	Net Present Value
N/A	Not Available or Not Applicable
O&M	Operational & Maintenance Expenses
Prop 218	Proposition 218 (1996) – State Constitutional amendment expanded restrictions of local government revenue collections.
Req't	*Requirement*

11 This appendix identifies abbreviations and acronyms that may be used in this report. This appendix has not been viewed, arranged, or edited by an attorney, nor should it be relied on as legal advice. The intent of this appendix is to support the recognition and analysis of this report. Any questions regarding clarification of this document should be directed to staff or an attorney specializing in this particular subject matter.

Res.	Residential
Rev.	Revenue
RTS	Readiness-to-Serve
R&R	Rehabilitation & Replacement
SFR	Single Family Residential
SRF Loan	State Revolving Fund Loan
SWRCB	State Water Resources Control Board
TSS / SS	Total Suspended Solids
V. / Vs. /vs.	Versus
WWTP	Wastewater Treatment Plant

APPENDIX B – SUMMARY OF WATER USE DATA

TABLE 18 : DEVELOPMENT OF THE BASE COMMODITY ALLOCATION FACTOR

Customer Class	2022 Volume (hcf)[1]	Conservation Factor	Adjusted Volume (hcf/Yr.)	Percent of Total Volume
Single Family	255,200	5.0%	242,440	**44.0%**
Apartment	70,754	5.0%	67,216	**12.2%**
Commercial	84,568	5.0%	80,340	**14.6%**
Industrial	33,978	5.0%	32,279	**5.9%**
Irrigation	96,284	5.0%	91,470	**16.6%**
Public Authority	39,384	5.0%	37,415	**6.8%**
Fire Meters	57	5.0%	54	**0.0%**
Grand Total	**580,225**	--	**551,214**	**100.0%**

1. Source: *Data summarized with Pivot tables in source files: Apartment Billing Data_jt.xlsx, Commercial Billing Data_jt.xlsx, Industrial Billing Data_jt.xlsx, Irrigation Billing Data_jt.xlsx, Public Authority Billing Data_jt.xlsx, Residential Billing Data_jt.xlsx'*

TABLE 19 : DEVELOPMENT OF THE BASE CAPACITY (MAX MONTH) ALLOCATION FACTOR

Customer Class	Average Monthly Use (hcf)	Peak Monthly Use (hcf)[1]	Peak Month Factor	Max Month Capacity Factor
Single Family	42,533	48,359	**1.14**	**41.8%**
Apartment	11,792	14,036	**1.19**	**12.1%**
Commercial	14,095	15,534	**1.10**	**13.4%**
Industrial	5,663	5,827	**1.03**	**5.0%**
Irrigation	16,047	21,761	**1.36**	**18.8%**
Public Authority	6,564	10,141	**1.54**	**8.8%**
Fire Meters	10	40	**4.21**	**0.0%**
Grand Total	**96,704**	**115,698**	**1.20**	**100.0%**

Consumption Summary by Class	CY 2022 (Jan-Nov)						Total
	January-22	March-22	May-22	July-22	September-22	November-22	
Single Family	39,736	37,176	40,670	45,886	48,359	43,373	255,200
Apartment	11,437	10,305	10,486	12,541	14,036	11,949	70,754
Commercial	14,063	12,511	13,064	14,563	15,534	14,833	84,568
Industrial	5,517	5,675	5,757	5,827	5,708	5,494	33,978
Irrigation	11,892	10,281	14,628	18,337	21,761	19,385	96,284
Public Authority	3,411	3,684	5,787	9,346	10,141	7,015	39,384
Fire	1	-	-	40	15	1	57
Total Consumption	**86,057**	**79,632**	**90,392**	**106,540**	**115,554**	**102,050**	**580,225**

Data summarized with Pivot tables in source files: Apartment Billing Data_jt.xlsx, Commercial Billing Data_jt.xlsx, Industrial Billing Data_jt.xlsx, Irrigation Billing Data_jt.xlsx, Public Authority Billing Data_jt.xlsx, Residential Billing Data_jt.xlsx

Water Consumption Data							
Summary of Consumption by Class		Dec. 2021-Nov. 2022 Consumption (hcf/year)	meters	Avg. hcf/bi-monthly Annual	Winter	Summer	Winter-to-Annual Ratio
Single Family		**255,200**	**2,031**	**21**	**19**	**23**	**90.4%**
	5/8"	165,143	1,325	21	19	23	90.2%
	3/4"	73,411	577	21	19	23	91.7%
	1"	15,555	128	20	18	23	88.2%
	1 1/2"	1,091	1	182	135	219	74.0%
Apartment		**70,754**	**54**	**218**	**201**	**246**	**92.2%**
	5/8"	8,844	14	105	103	105	97.5%
	3/4"	10,353	18	96	98	96	102.4%
	1"	12,757	9	236	124	435	52.6%
	1 1/2"	5,106	6	142	135	152	94.8%
	2"	22,500	5	750	754	757	100.5%
	4"	-	1	-	-	-	#DIV/0!
	6"	11,194	1	1,866	1,974	1,487	105.8%
Commercial		**84,568**	**316**	**45**	**42**	**48**	**94.3%**
	5/8"	9,210	98	16	15	18	95.1%
	3/4"	10,702	66	27	17	40	61.4%
	1"	13,897	60	39	38	41	97.4%
	1 1/2"	7,166	11	109	86	127	79.6%
	2"	36,250	42	144	132	154	92.0%
	3"	1,800	1	300	177	248	59.0%
	4"	4,774	10	80	166	-	208.2%
	6"	718	4	30	34	24	113.2%
	8"	47	18	0	-	1	0.0%
	10"	4	4	0	-	1	0.0%
	12"	-	2	-	-	-	#DIV/0!
Industrial		**33,978**	**11**	**515**	**509**	**524**	**98.8%**
	5/8"	161	2	13	13	12	93.2%
	1"	285	1	48	41	52	86.3%
	1 1/2"	201	1	34	77	12	229.9%
	2"	25,072	2	2,089	2,049	2,104	98.1%
	4"	8,023	1	1,337	1,282	1,466	95.9%
	6"	-	1	-	-	-	#DIV/0!
	8"	236	3	13	24	2	185.6%
Irrigation		**96,284**	**94**	**171**	**118**	**213**	**69.1%**
	5/8"	591	8	12	14	12	115.7%
	3/4"	11,553	8	241	107	355	44.4%
	1"	4,947	25	33	21	45	65.1%
	1 1/2"	1,071	2	89	60	106	66.9%
	2"	69,280	43	269	196	328	72.9%
	3"	6,182	1	1,030	644	1,134	62.5%
	4"	2,660	2	222	201	273	90.8%
	8"	-	3	-	-	-	#DIV/0!
	10"	-	2	-	-	-	#DIV/0!
Public Authority		**39,384**	**31**	**212**	**114**	**314**	**54.0%**
	5/8"	14,538	6	404	229	630	56.6%
	3/4"	17,092	2	1,424	678	2,254	47.6%
	1"	769	4	32	26	37	80.0%
	2"	6,964	11	106	65	118	61.6%
	4"	1	4	0	0	-	300.0%
	6"	1	2	0	-	-	0.0%
	8"	19	2	2	1	4	47.4%
Total		**580,168**	**2,537**	**38**	**33**	**44**	**85.7%**

APPENDIX C – WATER RATE STUDY SUMMARY TABLE

TABLE 1 : FINANCIAL PLAN AND SUMMARY OF REVENUE REQUIREMENTS

RATE REVENUE REQUIREMENTS SUMMARY	Budget	Projected				
	2023	2024	2025	2026	2027	2028
Sources of Water Funds						
Rate Revenue:						
Water Sales	$ 1,727,200	$ 1,727,200	$ 1,727,200	$ 1,727,200	$ 1,727,200	$ 1,727,200
Service Charges	$ 1,029,500	$ 1,029,500	$ 1,029,500	$ 1,029,500	$ 1,029,500	$ 1,029,500
Subtotal - Rate Revenue[1]	$ 2,756,700	$ 2,756,700	$ 2,756,700	$ 2,756,700	$ 2,756,700	$ 2,756,700
Non-Rate Revenue						
Management Fees	2,094,682	2,199,416	2,243,404	2,288,273	2,334,038	2,380,719
Taxes & Assessments	321,100	321,100	321,100	321,100	321,100	321,100
Other, Non-Rate Revenues	84,000	49,000	49,000	49,000	49,000	49,000
Subtotal - Non-Rate Revenue	2,499,782	2,569,516	2,613,504	2,658,373	2,704,138	2,750,819
Total Sources of Funds	**$ 5,256,482**	**$ 5,326,216**	**$ 5,370,204**	**$ 5,415,073**	**$ 5,460,838**	**$ 5,507,519**
Uses of Water Funds						
Operating Expenses [2]						
Supply & Treatment	$ 1,144,955	$ 1,184,304	$ 1,225,083	$ 1,267,348	$ 1,311,156	$ 1,356,569
Salaries & Benefits	2,638,000	2,879,900	2,967,077	3,057,475	3,151,235	3,248,501
Other Operating Expenses	345,000	355,350	366,011	376,991	388,301	399,950
General & Administrative	444,000	457,320	471,040	485,171	499,726	514,718
Subtotal: Operating Expenses	$ 4,571,955	$ 4,876,874	$ 5,029,209	$ 5,186,985	$ 5,350,418	$ 5,519,737
Other Expenditures:						
Existing Debt Service	$ 198,460	$ 198,459	$ 198,460	$ 198,460	$ 198,459	$ 198,459
New Debt Service	-	-	-	-	-	-
Rate-Funded Capital Expenses	687,400	-	-	-	-	-
Subtotal: Other Expenditures	$ 885,860	$ 198,459	$ 198,460	$ 198,460	$ 198,459	$ 198,459
Total Uses of Water Funds	**$ 5,457,815**	**$ 5,075,333**	**$ 5,227,669**	**$ 5,385,445**	**$ 5,548,877**	**$ 5,718,196**
plus: Revenue from Rate Increases[3]	-	165,402	608,679	1,012,525	1,406,737	1,823,081
Surplus/Deficit (After Rate Increases)	**$ (201,333)**	**$ 416,285**	**$ 751,214**	**$ 1,042,153**	**$ 1,318,698**	**$ 1,612,404**
Net Revenue Reqt. *(Total Uses less Non-Rate Revenue)*	**$ 2,958,033**	**$ 2,505,817**	**$ 2,614,165**	**$ 2,727,072**	**$ 2,844,739**	**$ 2,967,377**
Total Rate Revenue After Rate Increases	**$ 2,756,700**	**$ 2,922,102**	**$ 3,365,379**	**$ 3,769,225**	**$ 4,163,437**	**$ 4,579,781**
Projected Annual Rate Revenue Increase	***0.00%***	***12.00%***	***12.00%***	***12.00%***	***10.00%***	***10.00%***
Cumulative Increase from Annual Revenue Increases	*0.00%*	*12.00%*	*25.44%*	*40.49%*	*54.54%*	*70.00%*
Debt Coverage After Rate Increase [5]	***(0.01)***	***3.10***	***4.79***	***6.25***	***7.64***	***9.12***
Target Debt Coverage	***1.20***	***1.20***	***1.20***	***1.20***	***1.20***	***1.20***

1. Actual rate revenue is higher than shown in the O&M budget; an adjustment was made to ensure proposed rates are collecting the incresed rate revenue indicated by the rate increase.
2. The FY22-FY23 operating expenses are per the District's budget projections. Inflationary factors are applied to these expenses to project costs in FY24 and beyond.
3. Revenue from rate increases are implemented on January 1, 2024, so the District will collect 6 months of the increased rate revenue for the first year of the adjustment. The rate increase for future years through 2026 will occur on October 1 annually.

Selection of Financial Plan Alternative (Select rate option below)

Insert policy choice in box to right, based on options listed below	***4***

Financial Plan Alternatives	2023	2024	2025	2026	2027	2028
1 Fund 25% of CIP & Admin. Bldg.	*0.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*
2 Fund 50% of CIP & Admin. Bldg.	*0.00%*	*6.00%*	*6.00%*	*6.00%*	*6.00%*	*6.00%*
3 Fund 75% of CIP & Admin. Bldg.	*0.00%*	*8.00%*	*8.00%*	*8.00%*	*8.00%*	*8.00%*
4 Fund 100% of CIP & Admin. Bldg.	*0.00%*	*12.00%*	*12.00%*	*12.00%*	*10.00%*	*10.00%*
5 Fund 100% of CIP & Admin. Bldg. w/ $4 M Rev. Bonds	*0.00%*	*4.00%*	*6.00%*	*6.00%*	*8.00%*	*8.00%*

TABLE 2 : RESERVE FUND SUMMARY

SUMMARY OF CASH ACTIVITY	Budget	Projected				
	2023	2024	2025	2026	2027	2028
Total Beginning Cash [1]	$ 4,545,400					
Working Capital Reserve						
Beginning Reserve Balance	$ 1,100,000	$ 898,667	$ 1,219,000	$ 1,257,000	$ 1,297,000	$ 1,338,000
Plus: Net Cash Flow (After Rate Increases)	(201,333)	416,285	751,214	1,042,153	1,318,698	1,612,404
Plus: Grant Funding Reimbursement		1,275,000	-	-	-	-
Plus: Transfer of Debt Reserve Surplus	-	-	-	-	-	-
Plus: Transfer of Rate Stabilization Reserve Surplus	-	-	-	-	-	-
Less: Transfer Out to Water System Replacement Reserve	-	(1,370,952)	(713,214)	(1,002,153)	(1,277,698)	(1,570,404)
Less: Transfer Out to Rate Stabilization Fund	-	-	-	-	-	-
Ending Working Capital Reserve Bal.	***$ 898,667***	***$ 1,219,000***	***$ 1,257,000***	***$ 1,297,000***	***$ 1,338,000***	***$ 1,380,000***
Target Ending Balance (90-days of O&M) [2]	*$ 1,143,000*	*$ 1,219,000*	*$ 1,257,000*	*$ 1,297,000*	*$ 1,338,000*	*$ 1,380,000*
Capital Improvement Reserve						
Beginning Reserve Balance[1]	$ 3,125,400	$ 1,285,500	$ 1,040,897	$ (84,958)	$ (81,012)	$ 371,126
Plus: Grant Proceeds	-	-	-	-	-	-
Plus: Transfer of Operating Reserve Surplus	-	1,370,952	713,214	1,002,153	1,277,698	1,570,404
Less: Use of Reserves for Capital Projects	(1,839,900)	(1,615,555)	(1,839,070)	(998,206)	(825,561)	(276,487)
Ending Capital Improvement Reserve Bal.	***$ 1,285,500***	***$ 1,040,897***	***$ (84,958)***	***$ (81,012)***	***$ 371,126***	***$ 1,665,043***
Target Ending Balance (10% of net assets) [3]	*$ 1,285,500*	*$ 1,403,600*	*$ 1,539,900*	*$ 1,590,500*	*$ 1,622,900*	*$ 1,601,000*
Rate Stabilization Fund Reserve						
Beginning Reserve Balance[1]	$ 200,000	$ 200,000	$ 202,578	$ 205,189	$ 207,834	$ 210,513
Plus: Contributions to Rate Stabilization Fund	-	-	-	-	-	-
Plus: Interest Earnings[4]		2,578	2,611	2,645	2,679	2,714
Less: Transfer of Surplus to Operating Reserve		-	-	-	-	-
Ending Rate Stabilization Fund Reserve Bal.	***$ 200,000***	***$ 202,578***	***$ 205,189***	***$ 207,834***	***$ 210,513***	***$ 213,227***
Target Ending Balance (50% of Purch/Leased Water & Assmts.)	*$ 414,000*	*$ 427,000*	*$ 440,000*	*$ 453,000*	*$ 466,000*	*$ 480,000*
Target Ending Balance (45 days of water sales revenue)	*$ 208,000*	*$ 233,000*	*$ 261,000*	*$ 292,000*	*$ 321,000*	*$ 353,000*
Emergency/Disaster Reserve						
Beginning Reserve Balance[1]	$ 120,000	$ 120,000	$ 121,547	$ 123,114	$ 124,700	$ 126,308
Plus: Contributions to Emergency Reserve	-	-	-	-	-	-
Plus: Interest Earnings[3]	-	1,547	1,567	1,587	1,607	1,628
Less: Transfer of Surplus to Operating Reserve	-	-	-	-	-	-
Ending Emergency/Disaster Reserve Bal.	***$ 120,000***	***$ 121,547***	***$ 123,114***	***$ 124,700***	***$ 126,308***	***$ 127,936***
Target Ending Balance (1% of net assets) [3]	*$ 128,500*	*$ 140,400*	*$ 154,000*	*$ 159,100*	*$ 162,300*	*$ 160,100*
Ending Balance - Excludes Debt Reserve	***$ 2,504,167***	***$ 2,584,022***	***$ 1,500,344***	***$ 1,548,523***	***$ 2,045,947***	***$ 3,386,206***
Minimum Target Ending Balance - Excludes Debt Reserve	***$ 2,971,000***	***$ 3,190,000***	***$ 3,390,900***	***$ 3,499,600***	***$ 3,589,200***	***$ 3,621,100***
Ending Surplus/(Deficit) Compared to Reserve Targets	***$ (466,833)***	***$ (605,978)***	***$ (1,890,556)***	***$ (1,951,077)***	***$ (1,543,253)***	***$ (234,894)***
Days Cash on Hand for Unrestricted Funds [5]	***192***	***186***	***105***	***105***	***135***	***217***
District's Minimum DCOH (per District Fiscal Policies)	***97***	***98***	***99***	***99***	***99***	***98***

TABLE 3 : RESERVE FUND SUMMARY, CONTINUED

SUMMARY OF CASH ACTIVITY, continued	Budget	Projected				
	2023	2024	2025	2026	2027	2028
Restricted Reserves:						
Capacity Fee Fund (651)						
Beginning Reserve Balance [1]		$ -	$ -	$ -	$ -	$ -
Plus: Interest Earnings[3]	-	-	-	-	-	-
Plus: Impact Fee Revenue	-	-	-	-	-	-
Less: Debt Service (Impact Fund Allocation of 41%)	-	-	-	-	-	-
Less: Use of Reserves for Capital Projects	-	-	-	-	-	-
Ending Connection Fee Fund Balance	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***
Bond Project Fund						
Beginning Reserve Balance	$ -	$ -	$ -	$ -	$ -	$ -
Pus: Loan Financing	-	-	-	-	-	-
Plus: Revenue Bond Proceeds	-	-	-	-	-	-
Less: Use of Bond & Loan Funds for Capital Projects	-	-	-	-	-	-
Ending Bond Project Fund Balance	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***
Target Ending Balance	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*
Debt Reserve						
Beginning Reserve Balance	$ -	$ -	$ -	$ -	$ -	$ -
Plus: Reserve Funding from New Debt Obligations	-	-	-	-	-	-
Plus: Interest Earnings	-	-	-	-	-	-
Less: Transfer of Surplus to Operating Reserve	-	-	-	-	-	-
Ending Debt Reserve Balance	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***
Target Ending Balance	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*	*$ -*
Annual Interest Earnings Rate [3]	*0.00%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*	*1.29%*

1. Total beginning cash as of 07/01/2023; source file: *2023 LP Budget, v4, Submitted to NBS.xlsx* .
2. Existing District policy is 90 days of O&M. Source file: *2023 LP Budget, V4 Submitted to NBS.xlsx* , *Policy* tab.
3. Net assets is Capital Assets Net of Accumulated Depreciation from the District's CAFR, and excludes non-depreciable assets (i.e., land).
4. District's actual or budgeted interest earnings are used in analysis for unrestricted reserves in FY 2022/23. Beyond, interest earning rates are estimated at the 5-year average (FY '17/18 - '21/22) for funds invested in LAIF, per the California Treasurer's Office website, for the restricted reserves. Source: *https://www.treasurer.ca.gov/pmia-laif/historical/annual.asp* .
5. Days cash on hand represents the number of days cash the District has available to cover operating expenses and debt service payments.

TABLE 4 : REVENUE FORECAST [1] **Budget**

WATER OPERATIONS	Basis	2023	2024	2025	2026	2027	2028
Operating Revenues (Rate)							
Water Sales	1	$ 1,667,200	$ 1,667,200	$ 1,667,200	$ 1,667,200	$ 1,667,200	$ 1,667,200
Service Charges	1	908,800	908,800	908,800	908,800	908,800	908,800
Surplus Sales	1	60,000	60,000	60,000	60,000	60,000	60,000
Customer Charges	1	40,000	40,000	40,000	40,000	40,000	40,000
Fire Service	1	80,700	80,700	80,700	80,700	80,700	80,700
Miscellaneous Income	1	500	500	500	500	500	500
Management Fees							
Management Fees	3	$ 517,902	$ 543,797	$ 554,673	$ 565,767	$ 577,082	$ 588,623
IPU Service Fees (Labor)	3	777,500	816,375	832,703	849,357	866,344	883,671
BPOU Service Fees (Labor)	3	324,480	340,704	347,518	354,468	361,558	368,789
PVOU IZ Service Fees (Labor)	3	307,500	322,875	329,333	335,919	342,638	349,490
PVOU SZ Service Fees (Labor)	3	158,000	165,900	169,218	172,602	176,054	179,575
Other O&M Fees	3	9,300	9,765	9,960	10,160	10,363	10,570
Non-Operating Revenues							
Taxes & Assessments	1	$ 321,100	$ 321,100	$ 321,100	$ 321,100	$ 321,100	$ 321,100
Rental Revenue	1	41,000	41,000	41,000	41,000	41,000	41,000
Interest Revenue	1	35,000	-	-	-	-	-
Market Value Gain / (Loss)	1	-	-	-	-	-	-
Miscellaneous Income	1	7,500	7,500	7,500	7,500	7,500	7,500
Developer Fees	1	-	-	-	-	-	-
TOTAL: REVENUE		**$ 5,256,482**	**$ 5,326,216**	**$ 5,370,204**	**$ 5,415,073**	**$ 5,460,838**	**$ 5,507,519**

TABLE 5 : REVENUE SUMMARY, CONTINUED

WATER OPERATIONS	2023	2024	2025	2026	2027	2028
WATER RATE REVENUE	$ 2,576,000	$ 2,576,000	$ 2,576,000	$ 2,576,000	$ 2,576,000	$ 2,576,000
Fire Service	80,700	80,700	80,700	80,700	80,700	80,700
Management Fees	2,094,682	2,199,416	2,243,404	2,288,273	2,334,038	2,380,719
Interest Income	35,000	-	-	-	-	-
Non-Operating Revenues	470,100	470,100	470,100	470,100	470,100	470,100

TABLE 6 : OPERATING EXPENSE FORECAST [1]

WATER OPERATIONS FUND, Operations	Basis	2023	2024	2025	2026	2027	2028
Supply & Treatment							
Purchased & Leased Water	2	$ 495,655	$ 510,525	$ 525,840	$ 541,616	$ 557,864	$ 574,600
Power	5	250,000	262,500	275,625	289,406	303,877	319,070
Assessments	2	333,300	343,299	353,598	364,206	375,132	386,386
Treatment	2	6,000	6,180	6,365	6,556	6,753	6,956
Well & Pump Maintenance	2	60,000	61,800	63,654	65,564	67,531	69,556
Salaries & Benefits							
Total District Wide Labor	3	$ 1,577,000	$ 1,655,850	$ 1,688,967	$ 1,722,746	$ 1,757,201	$ 1,792,345
New Position (FY'24)	3	-	110,000	112,200	114,444	116,733	119,068
Directors Fees & Benefits	4	115,000	120,750	126,788	133,127	139,783	146,772
Benefits	4	405,000	425,250	446,513	468,838	492,280	516,894
OPEB Payments	4	110,000	115,500	121,275	127,339	133,706	140,391
OPEB Trust Contributions	4	60,000	63,000	66,150	69,458	72,930	76,577
Payroll Taxes	3	122,000	128,100	130,662	133,275	135,941	138,660
CalPERS Retirement (Normal Costs)	4	184,000	193,200	202,860	213,003	223,653	234,836
CalPERS Unfunded Accrued Liability	4	65,000	68,250	71,663	75,246	79,008	82,958
Other Operating Expenses							
General Plant	2	$ 60,000	$ 61,800	$ 63,654	$ 65,564	$ 67,531	$ 69,556
Transmission & Distribution	2	120,000	123,600	127,308	131,127	135,061	139,113
Vehicles & Equipment	2	50,000	51,500	53,045	54,636	56,275	57,964
Field Support & Other Expenses	2	60,000	61,800	63,654	65,564	67,531	69,556
Regulatory Compliance	2	55,000	56,650	58,350	60,100	61,903	63,760
General & Administrative							
District Office Expenses	2	$ 55,000	$ 56,650	$ 58,350	$ 60,100	$ 61,903	$ 63,760
Customer Accounts	2	32,000	32,960	33,949	34,967	36,016	37,097
Insurance	2	82,000	84,460	86,994	89,604	92,292	95,060
Professional Services	2	160,000	164,800	169,744	174,836	180,081	185,484
Training & Certification	2	45,000	46,350	47,741	49,173	50,648	52,167
Public Outreach & Conservation	2	25,000	25,750	26,523	27,318	28,138	28,982
Other Administrative Expenses	2	45,000	46,350	47,741	49,173	50,648	52,167
SUB-TOTAL: WATER OPERATIONS FUND, Operations		**$ 4,571,955**	**$ 4,876,874**	**$ 5,029,209**	**$ 5,186,985**	**$ 5,350,418**	**$ 5,519,737**

TABLE 7 : FORECASTING ASSUMPTIONS

INFLATION FACTORS[3]		2023	2024	2025	2026	2027	2028
1	Customer Growth[4]	--	0.00%	0.00%	0.00%	0.00%	0.00%
2	General Cost Inflation	--	3.00%	3.00%	3.00%	3.00%	3.00%
3	Labor Cost Inflation	--	5.00%	2.00%	2.00%	2.00%	2.00%
4	Benefits Cost Inflation	--	5.00%	5.00%	5.00%	5.00%	5.00%
5	Energy Cost Inflation	--	5.00%	5.00%	5.00%	5.00%	5.00%
6	No Escalation	--	0.00%	0.00%	0.00%	0.00%	0.00%

1. Inflationary factors are applied to project revenue and expenses in all future years. Data source for the FY 2022/23 budget: *2023 LP Budget, V4 Submitted to NBS.xlsx.*
2. Interest earnings beyond 2022/23 are calculated in the Financial Plan and Reserve Fund Summary of this model.
3. Inflation assumptions per District budget. Source file*: 2023 LP Budget V4 Submitted to NBS.xlsx, Assumptions tab.*
4. Customer growth is found in water supply growth estimated in City's Master Plan. Source file: *FINAL 2017 LPVCWD WMP.pdf, page 24.*

CHART 1

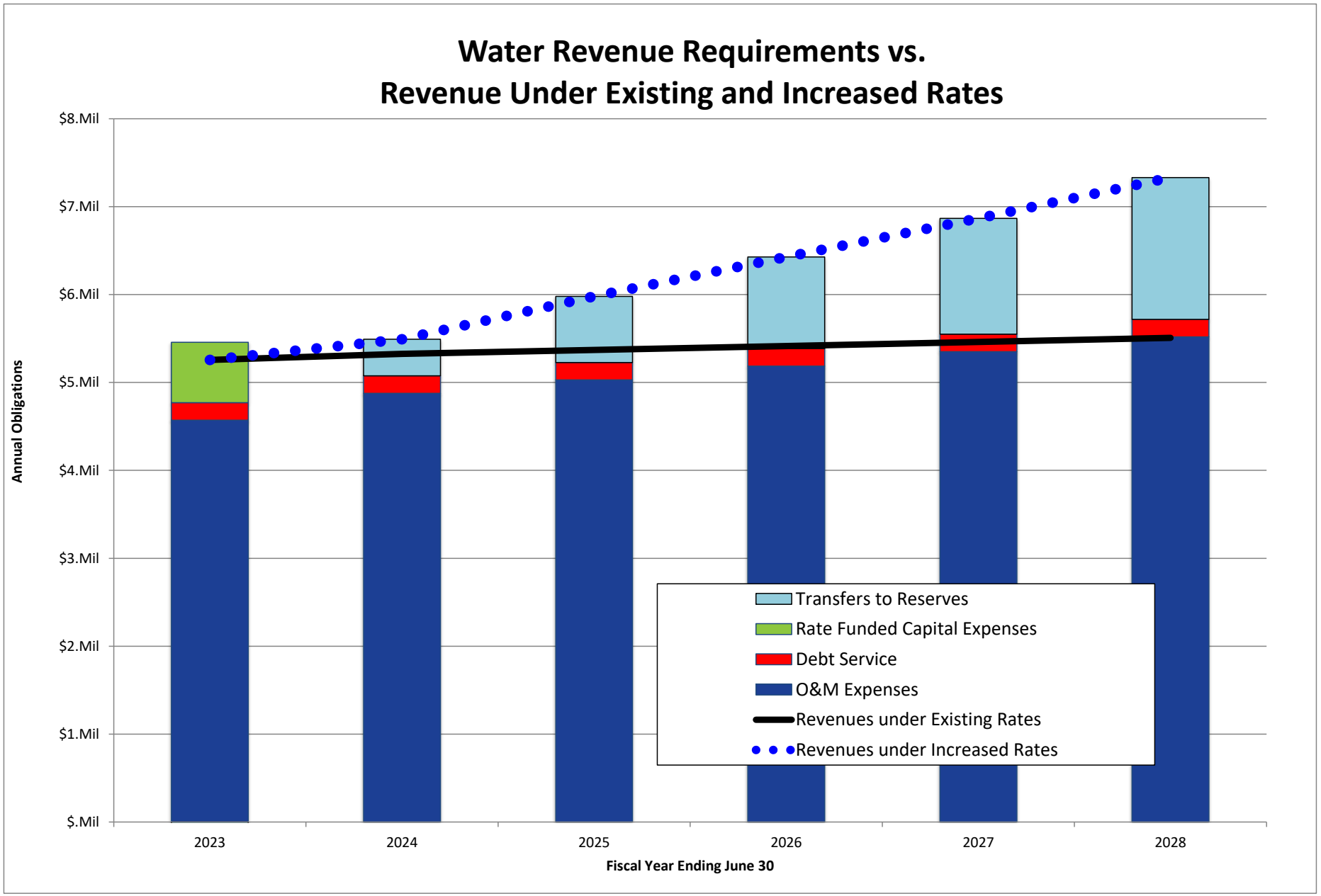

Water Revenue Requirements vs.
Revenue Under Existing and Increased Rates
$8.Mil
$7.Mil
$6.Mil
$5.Mil
$4.Mil
$3.Mil
$2.Mil
$1.Mil
$.Mil
Annual Obligations
2023
2024
2025
2026
2027
2028
Fiscal Year Ending June 30
Transfers to Reserves
Rate Funded Capital Expenses
Debt Service
O&M Expenses
Revenues under Existing Rates
Revenues under Increased Rates

CHART 2

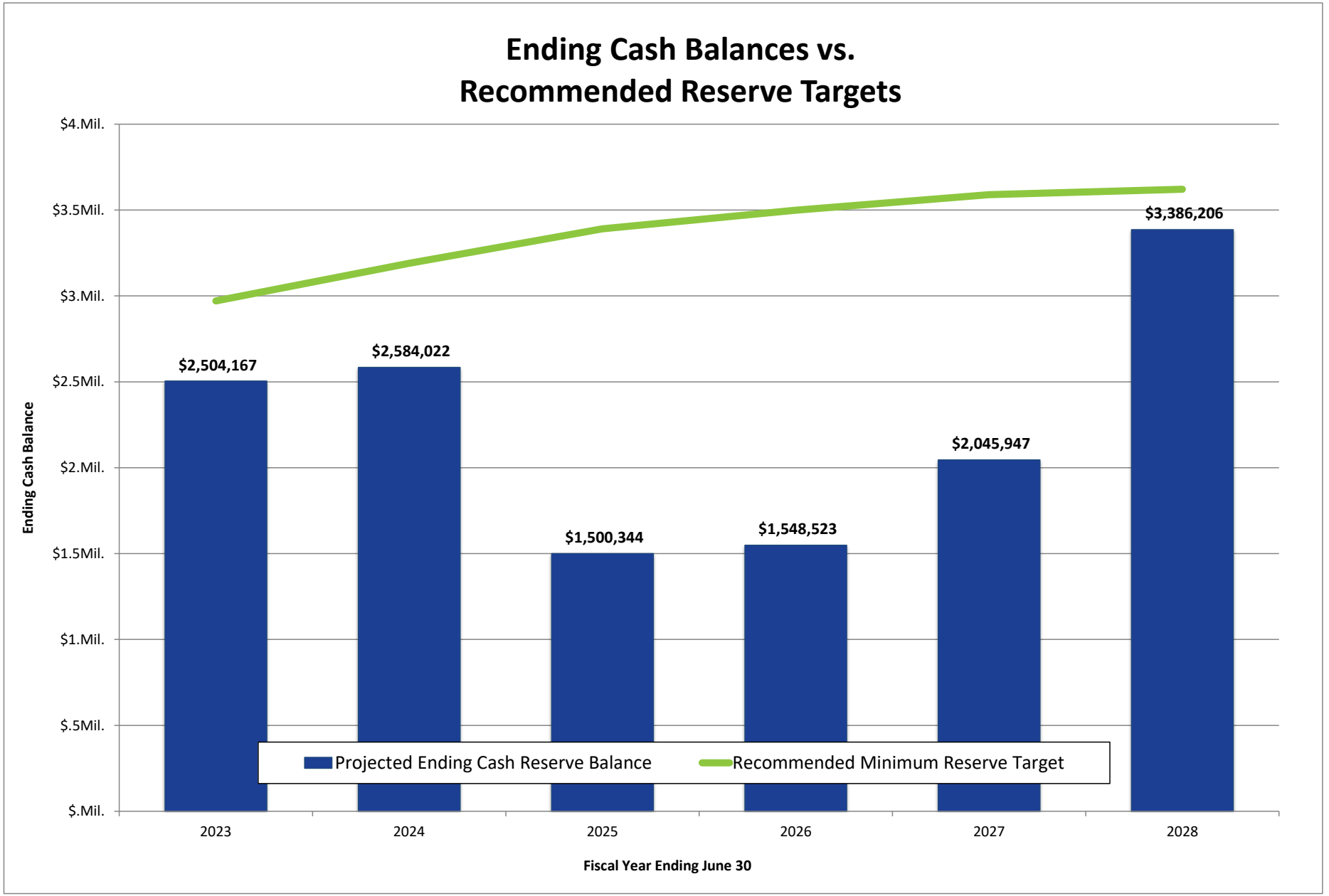

Ending Cash Balances vs.
Recommended Reserve Targets
$4.Mil.
$3.5Mil.
$3.Mil.
$2.5Mil.
$2.Mil.
$1.5Mil.
$1.Mil.
$.5Mil.
$.Mil.
Ending Cash Balance
$2,504,167
$2,584,022
$1,500,344
$1,548,523
$2,045,947
$3,386,206
Projected Ending Cash Reserve Balance
Recommended Minimum Reserve Target
2023
2024
2025
2026
2027
2028
Fiscal Year Ending June 30

CHART 3

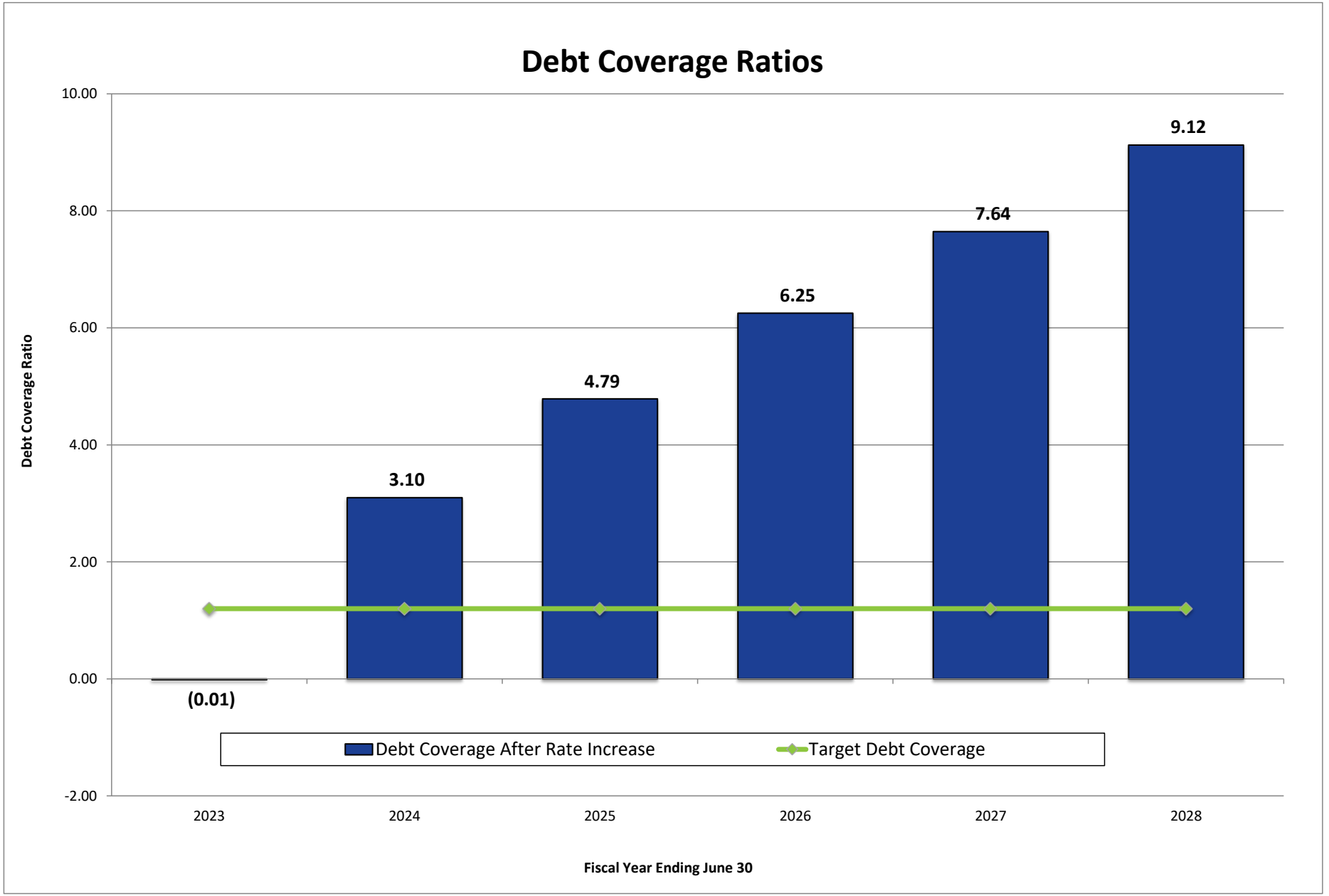

Debt Coverage Ratios
10.00
8.00
6.00
4.00
2.00
0.00
-2.00
Debt Coverage Ratio
(0.01)
3.10
4.79
6.25
7.64
9.12
Debt Coverage After Rate Increase
Target Debt Coverage
2023
2024
2025
2026
2027
2028
Fiscal Year Ending June 30

CHART 4

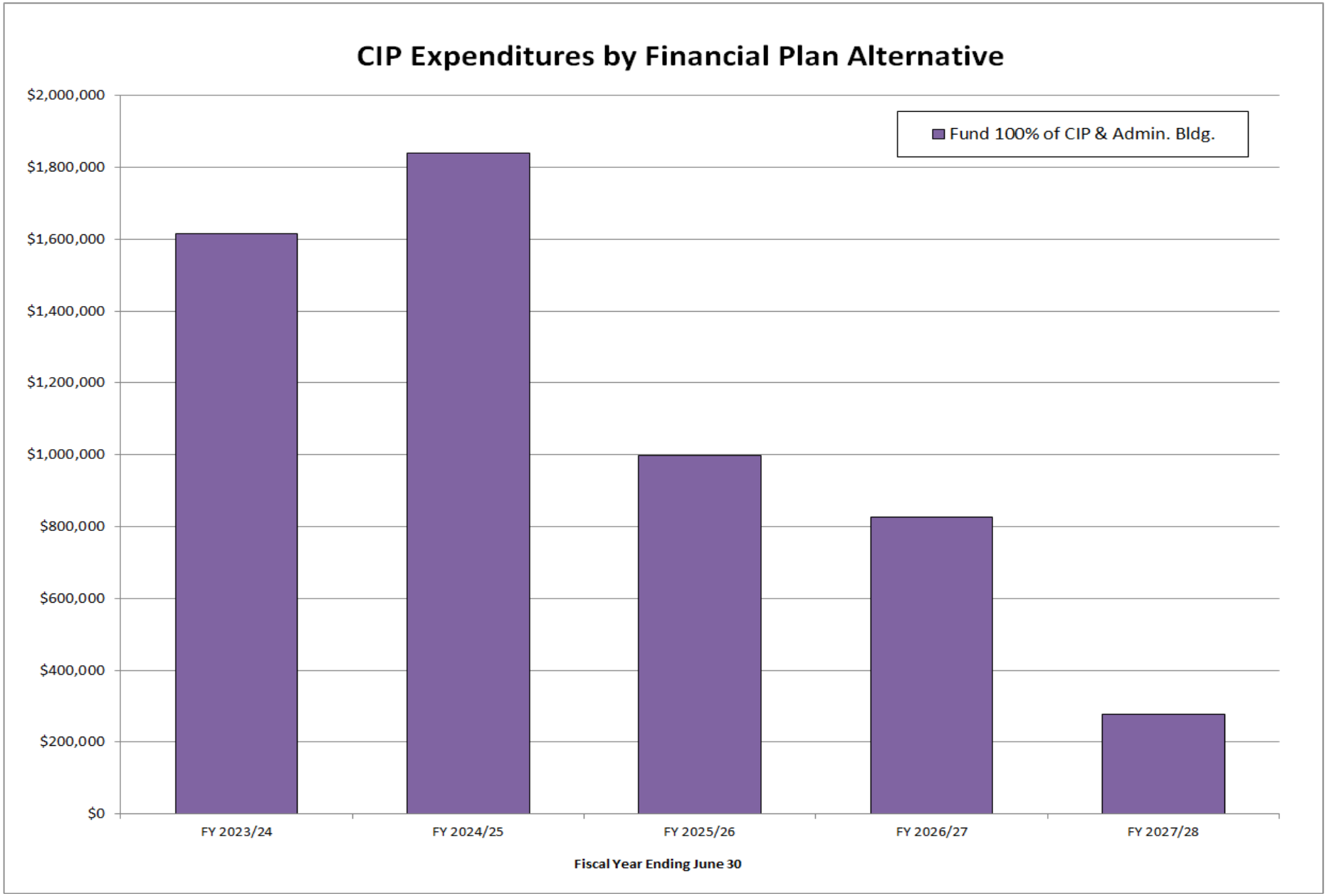

CIP Expenditures by Financial Plan Alternative
$2,000,000
$1,800,000
$1,600,000
$1,400,000
$1,200,000
$1,000,000
$800,000
$600,000
$400,000
$200,000
$0
Fund 100% of CIP & Admin. Bldg.
FY 2023/24
FY 2024/25
FY 2025/26
FY 2026/27
FY 2027/28
Fiscal Year Ending June 30

CHART 5

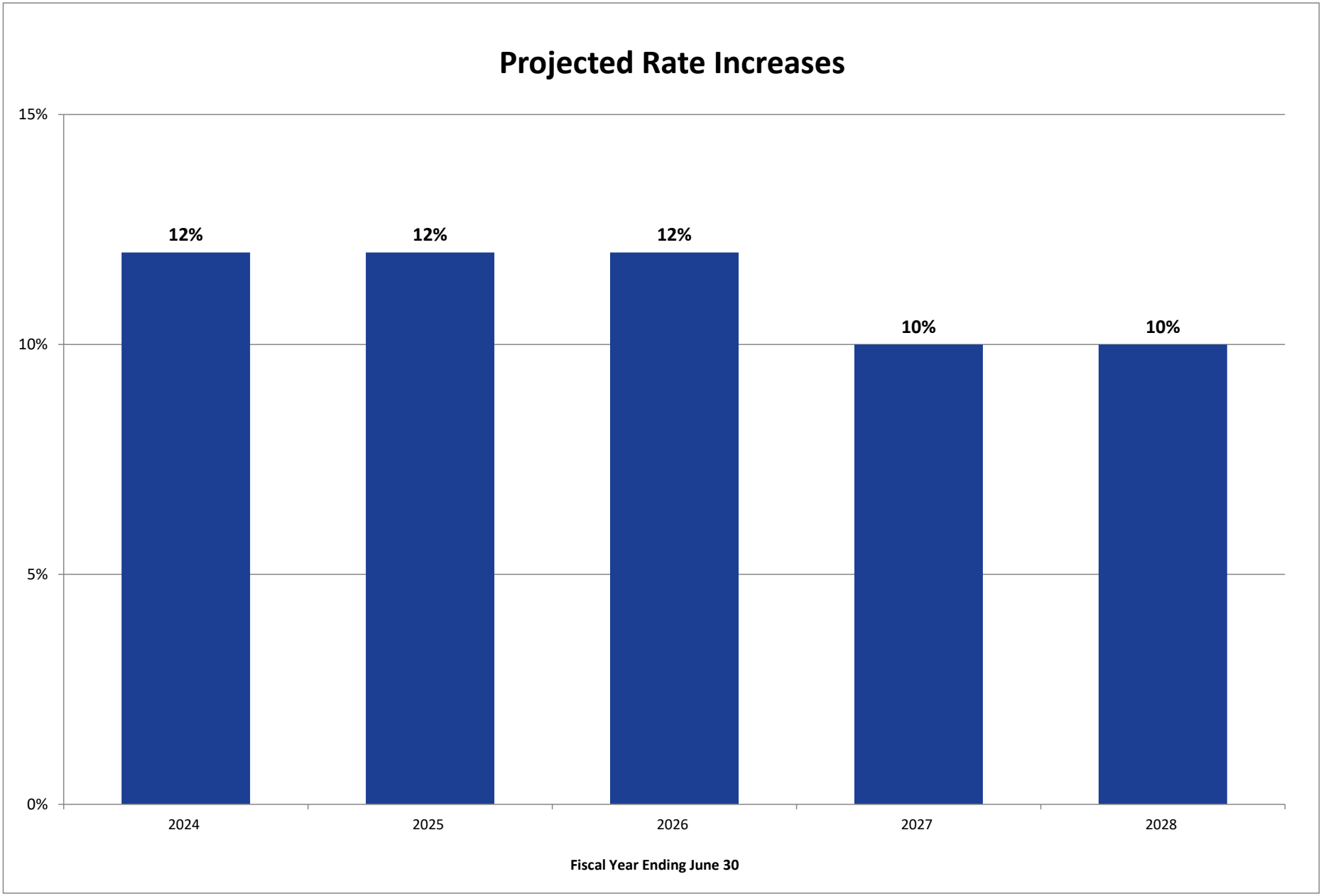

Projected Rate Increases
15%
10%
5%
0%
12%
12%
12%
10%
10%
2024
2025
2026
2027
2028
Fiscal Year Ending June 30

TABLE 8 : CAPITAL PROJECT FUNDING SUMMARY

CAPITAL FUNDING FORECAST	Budget	Projected				
Funding Sources:	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Grants	$ -	$ -	$ -	$ -	$ -	$ -
Use of Capacity Fee Reserves	-	-	-	-	-	-
Use of New Revenue Bond Proceeds	-	-	-	-	-	-
Use of Capital Improvement Reserve	1,839,900	1,615,555	1,839,070	998,206	825,561	276,487
Rate Revenue	687,400	-	-	-	-	-
Total Sources of Capital Funds	**$ 2,527,300**	**$ 1,615,555**	**$ 1,839,070**	**$ 998,206**	**$ 825,561**	**$ 276,487**
Uses of Capital Funds:						
Total Project Costs	$ 2,527,300	$ 1,615,555	$ 1,839,070	$ 998,206	$ 825,561	$ 276,487
Capital Funding Surplus (Deficiency)	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***	***$ -***

CIP FUNDING OPTIONS

CIP Funding Option Selected in Financial Plan	*4*

Policy Choice		**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
1	Fund 25% of CIP & Admin. Bldg.	$ 2,527,300	$ 403,889	$ 459,768	$ 249,552	$ 206,390	$ 69,122
2	Fund 50% of CIP & Admin. Bldg.	$ 2,527,300	$ 807,778	$ 919,535	$ 499,103	$ 412,780	$ 138,243
3	Fund 75% of CIP & Admin. Bldg.	$ 2,527,300	$ 1,211,666	$ 1,379,303	$ 748,655	$ 619,171	$ 207,365
4	Fund 100% of CIP & Admin. Bldg.	$ 2,527,300	$ 1,615,555	$ 1,839,070	$ 998,206	$ 825,561	$ 276,487
5	Fund 100% of CIP & Admin. Bldg. w/ $4 M Rev. Bonds	$ 2,527,300	$ 1,615,555	$ 1,839,070	$ 998,206	$ 825,561	$ 276,487

Capital Improvement Program Funding Choice	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
Effective Annual Funding Amount	$ 2,527,300	$ 1,615,555	$ 1,839,070	$ 998,206	$ 825,561	$ 276,487

New Debt Issued		**2023**	**2024**	**2025**	**2026**	**2027**	**2028**
5	Fund 100% of CIP & Admin. Bldg. w/ $4 M Rev. Bonds	$ -	$ 2,000,000	$ 2,000,000	$ -	$ -	$ -

CAPITAL IMPROVEMENT PROGRAM

TABLE 9 : CAPITAL IMPROVEMENT PROGRAM COSTS (*in Current-Year Dollars*)

Capital Improvement Program Projects[1]	2023	2024	2025	2026	2027	2028
Alternative Supply						
Recycled Water Project	$ 246,700	$ -	$ -	$ -	$ -	$ -
R & R						
Nitrate Treatment System	$ 954,400	$ -	$ -	$ -	$ -	$ -
Hudson Avenue Pumping Improvements	542,700	-	-	-	-	-
LP-CIWS Interconnection Ind Hills Pump Station No. 1	65,000	-	-	-	-	-
SCADA Improvements	40,000	-	-	-	-	-
Service Line Replacements	65,000	65,000	65,000	65,000	65,000	65,000
Valve Replacements	40,000	20,000	20,000	20,000	20,000	20,000
Meter Replacement / Reading Equipment	-	-	-	-	-	-
Fire Hydrant Repairs/ Replacement	38,500	38,500	38,500	38,500	38,500	38,500
Well 2 Rehabilitation	200,000	-	-	-	-	-
Main & 1st Street Building / Office Retrofit	-	-	-	-	-	-
Main & 1st Street Building / Office Remodel	-	-	-	-	-	-
Reservoir Reline & Recoating	-	-	250,000	-	300,000	-
Ferrero Lane and Rorimer St. Improvements	120,000	-		-	-	-
Pipeline Improvements in Hacienda (N. of Temple Ave)	-	-	-	130,000	-	-
Bamboo Street and Dalesford Drive Improvements	-	125,000	-	-	-	-
Pipeline Improvements in Inyo and Common	-	175,000	175,000	-	-	-
Old Valley Blvd General Waterline Replacements	-	-	150,000	350,000	-	-
Bamboo and Main Pipeline Improvements	-	-	-	-	-	-
Main St. B2 Pump Overhall (150 HP)	-	30,000	-	-	-	-
Main St. B1 Pump Overhall (50 HP)	-	-	25,000	-	-	-
Other Waterline Improvements	-	-	-	300,000	300,000	-
New Admin/Maint. Building	-	1,000,000	1,000,000	-	-	-
Capital Outlay						$ -
Dump Trucks	$ -	$ -	$ -	$ -	$ -	$ -
Service Trucks (Operations)	200,000	65,000	-	-	-	65,000
Pick-up Trucks (Supervisor)	-	40,000	-	-	-	40,000
Other Field Equipment	15,000	10,000	10,000	10,000	10,000	10,000
Office / Computer Equipment	-					
Estimated Future Projects[2]	$ -	$ -	$ -	$ -	$ -	$ -
Total: Capital Improvement Program Costs *(Current-Year Dollars)*	**$ 2,527,300**	**$ 1,568,500**	**$ 1,733,500**	**$ 913,500**	**$ 733,500**	**$ 238,500**

TABLE 10 : CAPITAL IMPROVEMENT PROGRAM COSTS (*in Future-Year Dollars*)[3]

Capital Improvement Program Projects[1]	2023	2024	2025	2026	2027	2028
Alternative Supply						
Recycled Water Project	$ 246,700	$ -	$ -	$ -	$ -	$ -
R & R	-	-	-	-	-	-
Nitrate Treatment System	954,400	-	-	-	-	-
Hudson Avenue Pumping Improvements	542,700	-	-	-	-	-
LP-CIWS Interconnection Ind Hills Pump Station No. 1	65,000	-	-	-	-	-
SCADA Improvements	40,000	-	-	-	-	-
Service Line Replacements	65,000	66,950	68,959	71,027	73,158	75,353
Valve Replacements	40,000	20,600	21,218	21,855	22,510	23,185
Meter Replacement / Reading Equipment	-	-	-	-	-	-
Fire Hydrant Repairs/ Replacement	38,500	39,655	40,845	42,070	43,332	44,632
Well 2 Rehabilitation	200,000	-	-	-	-	-
Main & 1st Street Building / Office Retrofit	-	-	-	-	-	-
Main & 1st Street Building / Office Remodel	-	-	-	-	-	-
Reservoir Reline & Recoating	-	-	265,225	-	337,653	-
Ferrero Lane and Rorimer St. Improvements	120,000	-	-	-	-	-
Pipeline Improvements in Hacienda (N. of Temple Ave)	-	-	-	142,055	-	-
Bamboo Street and Dalesford Drive Improvements	-	128,750	-	-	-	-
Pipeline Improvements in Inyo and Common	-	180,250	185,658	-	-	-
Old Valley Blvd General Waterline Replacements	-	-	159,135	382,454	-	-
Bamboo and Main Pipeline Improvements	-	-	-	-	-	-
Main St. B2 Pump Overhall (150 HP)	-	30,900	-	-	-	-
Main St. B1 Pump Overhall (50 HP)	-	-	26,523	-	-	-
Other Waterline Improvements	-	-	-	327,818	337,653	-
New Admin/Maint. Building	-	1,030,000	1,060,900	-	-	-
Capital Outlay						
Dump Trucks	$ -	$ -	$ -	$ -	$ -	$ -
Service Trucks (Operations)	200,000	66,950	-	-	-	75,353
Pick-up Trucks (Supervisor)	-	41,200	-	-	-	46,371
Other Field Equipment	15,000	10,300	10,609	10,927	11,255	11,593
Office / Computer Equipment	-	-	-	-	-	-
Estimated Future Projects[2]	$ -	$ -	$ -	$ -	$ -	$ -
Total: Capital Improvement Program Costs *(Future-Year Dollars)*	**$ 2,527,300**	**$ 1,615,555**	**$ 1,839,070**	**$ 998,206**	**$ 825,561**	**$ 276,487**

TABLE 11 : FORECASTING ASSUMPTIONS

Economic Variables	2023	2024	2025	2026	2027	2028
Annual Construction Cost Inflation, Per Engineering News Record[4]	*0.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*	*3.00%*
Cumulative Construction Cost Multiplier from 2023	*1.00*	*1.03*	*1.06*	*1.09*	*1.13*	*1.16*

1. Capital Improvement Program projects found in Source file: *2023 LP Budget, V4 Submitted to NBS.xlsx, CIP tab.*
2. Estimated future expenditures are the average of the previous 5 years.
3. Project costs are inflated by 3% per year, Engineering News Record estimates of construction cost inflation.
4. For reference purposes, the annual Construction Cost Inflation percentage is the 10 year average change in the Construction Cost Index for 2012-2022.
   Source: *Engineering News Record website (http://enr.construction.com).*

TABLE 12 : EXISTING DEBT OBLIGATIONS

Annual Repayment Schedules	Budget	Projected				
	2023	2024	2025	2026	2027	2028
2020 Recycled Water and Nitrate Treatment Projects ($3,000,000)[1]						
Principal Payment	$ 118,844	$ 122,327	$ 125,913	$ 129,604	$ 133,402	$ 137,312
Interest Payment	79,616	76,132	72,547	68,856	65,057	61,147
Subtotal: Annual Debt Service	**$ 198,460**	**$ 198,459**	**$ 198,460**	**$ 198,460**	**$ 198,459**	**$ 198,459**
Coverage Requirement(% above annual payment)	120%	120%	120%	120%	120%	120%
Reserve Requirement[2]	$ -	$ -	$ -	$ -	$ -	$ -
Grand Total: Existing Annual Debt Service	**$ 198,460**	**$ 198,459**	**$ 198,460**	**$ 198,460**	**$ 198,459**	**$ 198,459**
Grand Total: Existing Debt Reserve Target	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**

TABLE 13 : FUNDING SOURCES FOR EXISTING DEBT OBLIGATIONS

Allocation of Debt Service Payments to Funding Sources [4]	2023	2024	2025	2026	2027	2028
Fund 651 - Capacity Fee Fund	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Fund 653 - Water System Replacement Fund (59%)	**$ 198,460**	**$ 198,459**	**$ 198,460**	**$ 198,460**	**$ 198,459**	**$ 198,459**

1. Source file for amortization schedule: *2020 Installment Agreement - OPUS Bank.pdf, Page A1-A2.*
2. There is no reserve requirement for this bond issue.

TABLE 14 : CURRENT RATES

Existing Water Rate Schedule	2022
Bi-monthly fixed charge	
5/8 inch	$40.97
3/4 inch	$52.94
1 inch	$76.88
1.5 inch	$136.73
2 inch	$208.56
3 inch	$400.08
4 inch	$615.54
6 inch	$1,214.04
8 inch	$1,932.25

Variable Consumption Charge per HCF		
Residential Customers	**Tier 1**	**Tier 2**
	0-20 HCF	20+ HCF
Zone 1	$2.33	$3.96
Zone 2	$2.59	$4.22
Zone 3	$2.85	$4.48
Zone 4	$2.64	$4.27
Zone 5	$2.84	$4.48
Commercial, Industrial & Multi-Family Custor		**Uniform**
Zone 1		$2.77
Zone 2		$3.03
Zone 4		$3.08
Public Authority & Irrigation Customers		
Zone 1		$3.06
Zone 2		$3.32
Zone 4		$3.37

Private Fire Service	2022
Bi-monthly fixed charge	
1 inch	$9.96
1.5 inch	$12.05
2 inch	$15.65
3 inch	$28.59
4 inch	$50.91
6 inch	$131.00
8 inch	$269.15
10 inch	$348.86
12 inch	$558.06

Source file: *LPVCWD Rate Tables 2018-2022.pdf*

TABLE 15 : CLASSIFICATION OF EXPENSES

Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Fire Protection	Zonal	Basis of Classification				
	2024	(COM)	(CAP)	(CA)	(FP)	(Z)	(COM)	(CAP)	(CA)	(FP)	(Z)
OPERATING EXPENSES											
WATER OPERATIONS FUND, Operations											
Supply & Treatment											
Purchased & Leased Water	$ 510,525	$ 510,525	$ -	$ -	$ -	$ -	100%	0%	0%	0%	0%
Power	262,500	65,625	-	-	-	196,875	25%	0%	0%	0%	75%
Assessments	343,299	171,650	171,650	-	-	-	50%	50%	0%	0%	0%
Treatment	6,180	2,472	3,708	-	-	-	40%	60%	0%	0%	0%
Well & Pump Maintenance	61,800	27,810	27,810	-	3,090	3,090	45%	45%	0%	5%	5%
Salaries & Benefits											
Total District Wide Labor	$ 1,655,850	$ 1,159,095	$ 346,250	$ 82,793	$ 67,713	$ -	70%	21%	5%	4%	0%
New Position (FY'24)	110,000	77,000	23,002	5,500	4,498	-	70%	21%	5%	4%	0%
Directors Fees & Benefits	120,750	84,525	25,250	6,038	4,938	-	70%	21%	5%	4%	0%
Benefits	425,250	297,675	88,923	21,263	17,390	-	70%	21%	5%	4%	0%
OPEB Payments	115,500	80,850	24,152	5,775	4,723	-	70%	21%	5%	4%	0%
OPEB Trust Contributions	63,000	44,100	13,174	3,150	2,576	-	70%	21%	5%	4%	0%
Payroll Taxes	128,100	89,670	26,787	6,405	5,238	-	70%	21%	5%	4%	0%
CalPERS Retirement (Normal Costs)	193,200	135,240	40,399	9,660	7,901	-	70%	21%	5%	4%	0%
CalPERS Unfunded Accrued Liability	68,250	47,775	14,272	3,413	2,791	-	70%	21%	5%	4%	0%
Other Operating Expenses											
General Plant	$ 61,800	$ 43,260	$ 12,923	$ 3,090	$ 2,527	$ -	70%	21%	5%	4%	0%
GROUNDWATER PRODUCTION	123,600	86,520	32,026	-	5,054	-	70%	26%	0%	4%	0%
Vehicles & Equipment	51,500	36,050	10,769	2,575	2,106	-	70%	21%	5%	4%	0%
Field Support & Other Expenses	61,800	43,260	12,923	3,090	2,527	-	70%	21%	5%	4%	0%
Regulatory Compliance	56,650	39,655	11,846	2,833	2,317	-	70%	21%	5%	4%	0%
General & Administrative											
District Office Expenses	$ 56,650	$ -	$ 28,325	$ 28,325	$ -	$ -	0%	50%	50%	0%	0%
Customer Accounts	32,960	-	16,480	16,480	-	-	0%	50%	50%	0%	0%
Insurance	84,460	21,115	21,115	42,230	-	-	25%	25%	50%	0%	0%
Professional Services	164,800	41,200	41,200	82,400	-	-	25%	25%	50%	0%	0%
Training & Certification	46,350	11,588	11,588	23,175	-	-	25%	25%	50%	0%	0%
Public Outreach & Conservation	25,750	6,438	6,438	12,875	-	-	25%	25%	50%	0%	0%
Other Administrative Expenses	46,350	11,588	11,588	23,175	-	-	25%	25%	50%	0%	0%
SUB-TOTAL: WATER OPERATIONS FUND, Operations	**$ 4,876,874**	**$ 3,134,684**	**$ 1,022,593**	**$ 384,243**	**$ 135,389**	**$ 199,965**	**64%**	**21%**	**8%**	**2.78%**	**4.1%**

TABLE 16 : CLASSIFICATION OF EXPENSES, CONT.

Budget Categories	Total Revenue Requirements	Commodity	Capacity	Customer	Fire Protection	Zonal	Basis of Classification				
	2024	(COM)	(CAP)	(CA)	(FP)	(Z)	(COM)	(CAP)	(CA)	(FP)	(Z)
DEBT SERVICE PAYMENTS											
Existing Debt Service	$ 198,459	$ -	$ 198,459	$ -	$ -	$ -	0%	100%	0%	0%	0%
New Debt Service	$ -	$ -	$ -	$ -	$ -	$ -	0%	100%	0%	0%	0%
	$ 198,459	**$ -**	**$ 198,459**	**$ -**	**$ -**	**$ -**	**0%**	**100%**	**0%**	**0%**	**0%**
Rate funded Cap Exp.	$ -	$ -	$ -	$ -	$ -	$ -	30%	70%	0%	0%	0%
	$ 5,075,333	**$ 3,134,684**	**$ 1,221,052**	**$ 384,243**	**$ 135,389**	**$ 199,965**	**62%**	**24%**	**8%**	**2.67%**	**3.94%**
Operating Revenues (Rate)											
Water Sales (Excluded)											
Service Charges (Excluded)											
Non-Rate Revenue											
Surplus Sales	$ (60,000)	$ (37,058)	$ (14,435)	$ (4,542)	$ (1,601)	$ (2,364)	62%	24%	8%	3%	4%
Customer Charges	(40,000)	(24,705)	(9,623)	(3,028)	(1,067)	(1,576)	62%	24%	8%	3%	4%
Miscellaneous Income	(500)	(309)	(120)	(38)	(13)	(20)	62%	24%	8%	3%	4%
Management Fees											
Management Fees	$ (543,797)	$ (335,866)	$ (130,830)	$ (41,170)	$ (14,506)	$ (21,425)	62%	24%	8%	3%	4%
IPU Service Fees (Labor)	(816,375)	(504,219)	(196,408)	(61,806)	(21,778)	(32,165)	62%	24%	8%	3%	4%
BPOU Service Fees (Labor)	(340,704)	(210,429)	(81,968)	(25,794)	(9,089)	(13,424)	62%	24%	8%	3%	4%
PVOU IZ Service Fees (Labor)	(322,875)	(199,418)	(77,679)	(24,444)	(8,613)	(12,721)	62%	24%	8%	3%	4%
PVOU SZ Service Fees (Labor)	(165,900)	(102,465)	(39,913)	(12,560)	(4,426)	(6,536)	62%	24%	8%	3%	4%
Other O&M Fees	(9,765)	(6,031)	(2,349)	(739)	(260)	(385)	62%	24%	8%	3%	4%
Non-Operating Revenues											
Taxes & Assessments	$ (321,100)	$ (198,321)	$ (77,252)	$ (24,310)	$ (8,566)	$ (12,651)	62%	24%	8%	3%	4%
Rental Revenue	(41,000)	(25,323)	(9,864)	(3,104)	(1,094)	(1,615)	62%	24%	8%	3%	4%
Interest Revenue	-	-	-	-	-	-	62%	24%	8%	3%	4%
Market Value Gain / (Loss)	-	-	-	-	-	-	62%	24%	8%	3%	4%
Miscellaneous Income	(7,500)	(4,632)	(1,804)	(568)	(200)	(295)	62%	24%	8%	3%	4%
Developer Fees	-	-	-	-	-	-	62%	24%	8%	3%	4%
Non-Rate, Management Fees & Non-Operating Revenues	**$ (2,669,516)**	**$ (1,648,776)**	**$ (642,247)**	**$ (202,103)**	**$ (71,212)**	**$ (105,177)**	**62%**	**24%**	**8%**	**3%**	**4%**
Total Revenue Requirements	**$ 2,405,817**	**$ 1,485,907**	**$ 578,805**	**$ 182,139**	**$ 64,177**	**$ 94,788**					
REV. REQT'S CHECK TO FP:	**100.0%**	**61.8%**	**24.1%**	**7.6%**	**2.67%**	**3.94%**					

TABLE 17 : CLASSIFICATION OF EXPENSES, CONT.

Adjustments to Classification of Expenses						
Adjustment for Current Rate Level:	**Total**	**(COM)**	**(CAP)**	**(CA)**	**(FP)**	**(Z)**
Test Year Target Rate Rev. After Rate Increases	*$3,087,504*					
ADJUSTED Projected Rate Revenue at Current Rates	*$2,756,700*					
Test Year Projected Rate Adjustment	*12%*					
Net Revenue Requirements	**$ 3,087,504**	**$ 1,906,939**	**$ 742,809**	**$ 233,748**	**$ 82,362**	**$ 121,646**
Adjustment for Rate Design:		*87.4%*				
ADJUSTED Projected Rate Revenue w/ Rate Increase	**$ 3,087,504**	**$ 1,667,252**	**$ 893,620**	**$ 281,206**	**$ 99,084**	**$ 146,343**
Percent of Revenue - Existing Rate Design	*100.0%*	*54.0%*	*28.9%*	*9.1%*	*3.2%*	*4.7%*

These %'s self-adjust based on the COM adjustment

Cost-of-Service Allocation to Fixed vs. Variable Charges	
Fixed Charges	*41%*
Variable Charges	*59%*

TABLE 18 : DEVELOPMENT OF THE BASE COMMODITY ALLOCATION FACTOR

Customer Class	2022 Volume (hcf)[1]	Conservation Factor	Adjusted Volume (hcf/Yr.)	Percent of Total Volume
Single Family	255,200	5.0%	242,440	**44.0%**
Apartment	70,754	5.0%	67,216	**12.2%**
Commercial	84,568	5.0%	80,340	**14.6%**
Industrial	33,978	5.0%	32,279	**5.9%**
Irrigation	96,284	5.0%	91,470	**16.6%**
Public Authority	39,384	5.0%	37,415	**6.8%**
Fire Meters	57	5.0%	54	**0.0%**
Grand Total	**580,225**	--	**551,214**	**100.0%**

1. Source: Data summarized with Pivot tables in source files: *Apartment Billing Data_jt.xlsx* , *Commercial Billing Data_jt.xlsx* , *Industrial Billing Data_jt.xlsx* , *Irrigation Billing Data_jt.xlsx* , *Public Authority Billing Data_jt.xlsx* , *Residential Billing Data_jt.xlsx* .

Commodity Related Costs: *These costs are associated with the total consumption (flow) of water over a* ***s*** *pecified period of time (e.g. annual).*

TABLE 19 : DEVELOPMENT OF THE BASE CAPACITY (MAX MONTH) ALLOCATION FACTOR

Customer Class	Average Monthly Use (hcf)	Peak Monthly Use (hcf)[1]	Peak Month Factor	Max Month Capacity Factor
Single Family	42,533	48,359	**1.14**	**41.8%**
Apartment	11,792	14,036	**1.19**	**12.1%**
Commercial	14,095	15,534	**1.10**	**13.4%**
Industrial	5,663	5,827	**1.03**	**5.0%**
Irrigation	16,047	21,761	**1.36**	**18.8%**
Public Authority	6,564	10,141	**1.54**	**8.8%**
Fire Meters	10	40	**4.21**	**0.0%**
Grand Total	**96,704**	**115,698**	**1.20**	**100.0%**

1. Based on peak monthly data (peak day data not available).

Capacity Related Costs: *Costs associated with the maximum demand required at one point in time or the maximum size of facilities required to meet this demand.*

TABLE 20 : DEVELOPMENT OF THE CUSTOMER ALLOCATION FACTOR

Customer Class	Number of Meters[1]	Percent of Total
Single Family	2,031	**80.1%**
Apartment	54	**2.1%**
Commercial	284	**11.2%**
Industrial	11	**0.4%**
Irrigation	94	**3.7%**
Public Authority	31	**1.22%**
Fire Meters	32	**1.26%**
Grand Total	**2,537**	**100.0%**

1. Number of meters is from source: *Apartment Billing Data_jt.xlsx* , *Commercial Billing Data_jt.xlsx* , *Industrial Billing Data_jt.xlsx* , *Irrigation Billing Data_jt.xlsx* , *Public Authority Billing Data_jt.xlsx* , *Residential Billing Data_jt.xlsx* .

Customer Related Costs *: Costs associated with having a customer on the water system. These costs vary with the addition or deletion of customers on the system. Examples: Meter-reading, Postage and billing.*

TABLE 21 : METER EQUIVALENCY FACTORS USED IN FIXED CHARGE CALCULATIONS

Meter Size	Standard Meters		Fire Service Meters	
	Meter Capacity (gpm)[1]	*Residential* Equivalency to 5/8-inch	Meter Capacity (gpm)[1]	Equivalency to 1-inch
	Displacement Meters			
5/8 inch	20	1.00		
3/4 inch	30	1.50		
1 inch	50	2.50		
1.5 inch	100	5.00		
2 inch	160	8.00		
	Compound Class I Meters		*Fire Service Type I & II*	
3 inch	320	16.00		
4 inch	500	25.00	700	14.00
6 inch	1,000	50.00	1,600	32.00
8 inch	1,600	80.00	2,800	56.00
	Propeller Type (C704-08)			
10 inch	2,400	120.00	4,400	88.00
12 inch[2]	3,375	168.75	*6,600*	132.00

1. Per AWWA Manual M-1, Sixth Edition, Table B-1, p. 326.
2. Value not available in AWWA M-6, Table 5-3; this is estimated based on existing rates.

TABLE 22 : COST OF SERVICE ALLOCATIONS

Classification Components	Current Rate Structure 46% Fixed/54% Variable Net Revenue Requirements		Alternative Rate Structure 40% Fixed/60% Variable Net Revenue Requirements 50% Fixed / 50% Variable	
Commodity-Related Costs	$ 1,667,252	*54.0%*	$ 1,706,159	*55.3%*
Zonal-Related Costs	$ 146,343	*4.7%*	$ 146,343	*4.7%*
Total Variable Costs	**$ 1,813,595**	*58.7%*	**$ 1,852,502**	*60.0%*
Capacity-Related Costs (Fixed)	$ 893,620	*28.9%*	$ 854,712	*27.7%*
Customer-Related Costs	$ 281,206	*9.1%*	$ 281,206	*9.1%*
Total Fixed Costs	**$ 1,174,825**	*38.1%*	**$ 1,135,918**	*36.8%*
Fire Protection-Related Costs	$ 99,084	*3.2%*	$ 99,084	*3.2%*
Total Fixed Costs	**$ 1,273,909**	*41.3%*	**$ 1,235,002**	*40.0%*
Subtotal Revenue Requirement	**$ 3,087,504**	**100%**	**$ 3,087,504**	**100%**

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TABLE 23 : ALLOCATION OF ADJUSTED NET REVENUE REQUIREMENTS

Proposed Rate Structure (46% Fixed / 54% Variable)							
Customer Class	**Cost Classification Components**					**Cost of Service Net Revenue**	**% of COS Net Revenue Reqts**
	Commodity	**Capacity (Fixed)**	**Customer**	**Fire Protection**	**Zonal**		
Single Family	$ 733,306	$ 373,512	$ 225,120	$ -	$ 64,366	$ 1,396,304	45%
Apartment	203,309	108,410	5,985	-	17,845	335,550	11%
Commercial	243,003	119,980	31,479	-	21,330	415,792	13%
Industrial	97,634	45,006	1,219	-	8,570	152,430	5%
Irrigation	276,668	168,076	10,419	-	24,285	479,448	16%
Public Authority	113,168	78,326	3,436	-	9,933	204,864	7%
Fire	164	309	3,547	99,084	-	103,103	3%
Grand Total	**$ 1,667,252**	**$ 893,620**	**$ 281,206**	**$ 99,084**	**$ 146,329**	**$ 3,087,490**	**100%**
% of Costs by Classification	*54%*	*29%*	*9%*	*3%*	*5%*	*100%*	

TABLE 24 : CALCULATION OF BI-MONTHLY FIXED METER SERVICE CHARGES

Proposed Rate Structure (46% Fixed / 54% Variable)												
Number of Meters by Class and Size[1]	**2023**											**Total**
	5/8 inch	**3/4 inch**	**1 inch**	**1.5 inch**	**2 inch**	**3 inch**	**4 inch**	**6 inch**	**8 inch**	**10 inch**	**12 inch**	
All Customers (Except Fire Meters)	1,453	671	227	21	103	2	13	5	8	2	-	2,505
Hydraulic Capacity Factor[2]	*1.00*	*1.50*	*2.50*	*5.00*	*8.00*	*16.00*	*25.00*	*50.00*	*80.00*	*120.00*	*168.75*	
Total Equivalent Meters	**1,453**	**1,007**	**568**	**105**	**824**	**32**	**325**	**250**	**640**	**240**	**-**	**5,443**
Bi-Monthly Fixed Service Charges												
Customer Costs ($/Acct/mo.)[3]	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	
Capacity Costs ($/Acct/mo.)[4]	$ 27.36	$ 41.04	$ 68.41	$ 136.81	$ 218.90	$ 437.81	$ 684.07	$ 1,368.15	$ 2,189.04	$ 3,283.56	$ 4,617.50	
Total Bi-Monthly Meter Charge	**$ 45.84**	**$ 59.52**	**$ 86.88**	**$ 155.29**	**$ 237.38**	**$ 456.28**	**$ 702.55**	**$ 1,386.62**	**$ 2,207.51**	**$ 3,302.03**	**$ 4,635.97**	
Annual Fixed Costs Allocated to Bi-Monthly Meter Charges												
Customer Costs	$ 277,659											
Capacity Costs	$ 893,620											
Total Fixed Meter Costs	$ 1,171,278											
Annual Revenue from Monthly Bi-Meter Charges												
Customer Charges	$ 161,053	$ 74,375	$ 25,161	$ 2,328	$ 11,417	$ 222	$ 1,441	$ 554	$ 887	$ 222	$ -	**$ 277,659**
Capacity Charges	238,550	165,245	93,171	17,239	135,283	5,254	53,358	41,044	105,074	39,403	-	**$ 893,620**
Total Rev. from Bi-Mo. Meter Charges	**$ 399,603**	**$ 239,620**	**$ 118,332**	**$ 19,566**	**$ 146,699**	**$ 5,475**	**$ 54,799**	**$ 41,599**	**$ 105,961**	**$ 39,624**	**$ -**	**$ 1,171,278**

1. Number of meters by size and class is per the District's utility billing data as of November 2022 in the Billed Consumption Report by Month spreadsheets.
2. Source: AWWA Manual M1, "Principles of Water Rates, Fees, and Charges", Table B-1. Assumes displacement meters for 5/8 - 2 inch meters, Compound Class I for 3 - 8 inch meters, and Turbine Class II for 10-12 inch meters.
3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.
4. Capacity costs are allocated by meter size and the hydraulic capacity of the meter.

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TABLE 25 : CALCULATION OF BI-MONTHLY FIXED METER SERVICE CHARGES - FIRE METERS

												Proposed Rate Structure (46% Fixed / 54% Variable)
Number of Meters by Class and Size[1]	**2023**											**Total**
	5/8 inch	**3/4 inch**	**1 inch**	**1.5 inch**	**2 inch**	**3 inch**	**4 inch**	**6 inch**	**8 inch**	**10 inch**	**12 inch**	
Fire Meters	-	-	-	-	-	-	5	3	18	4	2	32
Hydraulic Capacity Factor[2]	*0.40*	*0.60*	*1.00*	*2.00*	*3.20*	*7.00*	*14.00*	*32.00*	*56.00*	*88.00*	*132.00*	
Total Equivalent Meters	**-**	**-**	**-**	**-**	**-**	**-**	**70**	**96**	**1,008**	**352**	**264**	**1,790**
Bi-Monthly Fixed Service Charges												
Customer Costs ($/Acct/mo.)[3]	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	$ 18.47	
Fire Protection Costs ($/Acct/mo.)[4]	$ 3.69	$ 5.54	$ 9.23	$ 18.45	$ 29.52	$ 64.58	$ 129.16	$ 295.22	$ 516.64	$ 811.86	$ 1,217.79	
Total Bi-Monthly Meter Charge	**$ 22.16**	**$ 24.01**	**$ 27.70**	**$ 36.92**	**$ 48.00**	**$ 83.05**	**$ 147.63**	**$ 313.70**	**$ 535.11**	**$ 830.33**	**$ 1,236.26**	
Annual Fixed Costs Allocated to Bi-Monthly Meter Charges												
Customer Costs	$ 3,547											
Fire Protection Costs	$ 99,084											
Total Fixed Meter Costs	$ 102,631											
Annual Revenue from Monthly Bi-Meter Charges												
Customer Charges	$ -	$ -	$ -	$ -	$ -	$ -	$ 554	$ 333	$ 1,995	$ 443	$ 222	**$ 3,547**
Fire Protection Costs	-	-	-	-	-	-	3,875	5,314	55,797	19,485	14,613	**99,084**
Total Revenue from Bi-Mo. Meter Charges	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 4,429**	**$ 5,647**	**$ 57,792**	**$ 19,928**	**$ 14,835**	**$ 102,631**

1. Number of meters by size is from the District's 2019 rate study and assumes the number of meters has not changed.
2. Source: AWWA Manual M6, "Water Meters - Selection, Installation, Testing and Maintenance", Table 5-3. Assumes Displacement Meters for 5/8 - 2 inch meters and Fire Service Type I & II for 3 - 10 inch meters.
3. Customer costs are allocated to each customer by dividing the total customer costs by the total number of customers.
4. Fire Protection costs are allocated by meter size and the hydraulic capacity of the meter.

Projected Revenue From Fixed Charges by Customer Class												*Proposed Rate Structure (46% Fixed / 54% Variable)*
Number of Meters by Class and Size[1]	**2023**											**Total**
	5/8 inch	**3/4 inch**	**1 inch**	**1.5 inch**	**2 inch**	**3 inch**	**4 inch**	**6 inch**	**8 inch**	**10 inch**	**12 inch**	
Single Family	1,325	577	128	1	-	-	-	-	-	-	-	2,031
Apartment	14	18	9	6	5	-	1	1	-	-	-	54
Commercial	98	66	60	11	42	1	5	1	-	-	-	284
Industrial	2	-	1	1	2	-	1	1	3	-	-	11
Irrigation	8	8	25	2	43	1	2	-	3	2	-	94
Public Authority	6	2	4	-	11	-	4	2	2	-	-	31
Fire Meters	-	-	-	-	-	-	5	3	18	4	2	32
Total Meters/Accounts	**1,453**	**671**	**227**	**21**	**103**	**2**	**18**	**8**	**26**	**6**	**2**	**2,537**
All Customers Fixed Charges by Meter Size	***$ 45.84***	***$ 59.52***	***$ 86.88***	***$ 155.29***	***$ 237.38***	***$ 456.28***	***$ 702.55***	***$ 1,386.62***	***$ 2,207.51***	***$ 3,302.03***	***$ 4,635.97***	
Fixed Charges - Fire Meters Only	***$ 22.16***	***$ 24.01***	***$ 27.70***	***$ 36.92***	***$ 48.00***	***$ 83.05***	***$ 147.63***	***$ 313.70***	***$ 535.11***	***$ 830.33***	***$ 1,236.26***	
Revenue from Fixed Charges												
All Customers	$ 399,603	$ 239,620	$ 118,332	$ 19,566	$ 146,699	$ 5,475	$ 54,799	$ 41,599	$ 105,961	$ 39,624	$ -	**$ 1,171,278**
Fire	$ -	$ -	$ -	$ -	$ -	$ -	$ 4,429	$ 5,647	$ 57,792	$ 19,928	$ 14,835	**$ 102,631**
Total Revenue - Fixed Charges												***$ 1,273,909***

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TABLE 26 : BREAKDOWN OF VOLUMETRIC COSTS

Volumetric Costs - With and Without Pumping Costs	46F/54V Rate Structure	Alt. 40/60 Rate Structure
	2024	2024
Summary of Volumetric Costs		
Commodity-Related less Purchased/Leased Costs	$ 1,396,212	$ 1,435,120
Purchased/Leased Costs (Adjusted)	$ 271,040	$ 271,040
Total Volumetric Costs (w/o Pumping Costs)	**$ 1,667,252**	**$ 1,706,159**
Zonal-Related Costs	$ 146,329	$ 146,343
TOTAL VOLUMETRIC RATE COSTS	**$ 1,813,581**	**$ 1,852,502**

Adjustment of Purchased/Leased Cost for Non-Rate Revenues

Net Purchased/Leased Costs (2024)	
Net Rev. Req't. (from Funct./Classif.)	**$ 2,405,817**
Rev. Req't. w/o Non-Rate Rev. Reductions	**$ 5,075,333**
% Reduction	**47.40%**
Plus Rate Increase	**12.00%**
Total Adjustment to Purchased/Leased Costs	**53.09%**
Budgeted Purchased/Leased Costs	**$ 510,525**
Adjusted Purchased/Leased Costs	**$ 271,040**

Allocation of Source of Supply to Tiers			
Source of Supply	***Annual AF*** [1]	***Supply in %***	***Annual HCF*** [1]
Tier 1 - Wells	850	65.4%	360,409
Tier 2 - Wells (Purchased/Leased)	450	34.6%	190,805
Total Supply	1,300	100.0%	551,214

1. District Data.

TABLE 27 : ALLOCATION OF COMMODITY COSTS BY TIER (without Zonal Costs)

ALLOCATION OF COMMODITY COSTS BY TIER (without Zonal Costs)				46F/54V Rate Structure	
Volumetric Rate Revenue Requirements	***Allocated $ and Consumption by Tier***			***Allocation %'s***	
	Tier 1	*Tier 2*	*Total*	*Tier 1*	*Tier 2*
Commodity-Related less Purchased/Leased Costs	$912,908	$483,304	$1,396,212	65.4%	34.6%
Purchased/Leased Costs (Adjusted)	$0	$271,040	$271,040	0.0%	100.0%
Total Volumetric Costs (***w/o Pumping Costs***)	$912,908	$754,344	$1,667,252		
Residential Consumption by Tier in HCF	360,409	190,805	551,214	65.4%	34.6%
Tiered/Uniform Rates	**$2.53**	**$3.95**	**$3.02**	*n.a.*	*n.a.*

TABLE 28 : ALLOCATION OF COMMODITY COSTS BY TIER (without Zonal Costs)

ALLOCATION OF COMMODITY COSTS BY TIER (without Zonal Costs)					Alt. 40/60 Rate Structure
Volumetric Rate Revenue Requirements	***Allocation %'s***		***Allocated $***		
	Tier 1	*Tier 2*	*Tier 1*	*Tier 2*	*Total*
Commodity-Related less Purchased/Leased Costs	65.4%	34.6%	$938,347	$496,772	$1,435,120
Purchased/Leased Costs (Adjusted)	0.0%	100.0%	$0	$271,040	$271,040
Total Volumetric Costs (w/o Pumping Costs)	55.0%	45.0%	$938,347	$767,812	$1,706,159
Total Tier 1 & Tier 2	65.4%	34.6%	360,409	190,805	551,214
Tiered/Uniform Rates	n.a.	n.a.	**$2.60**	**$4.02**	**$3.10**

TABLE 29 : NET CONSUMPTION BY ZONE (HCF) ***Applies to both Current and Alt. Rate Structures***

NET CONSUMPTION BY ZONE (HCF)						
Customer Class	**Net Consumption by Zone and Class (hcf/yr.)**					***Total***
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	***Zone 5***	***Consumption***
Residential - Tier 1	98,580	55,490	5,490	6,047	1,254	***166,862***
Residential - Tier 2	52,190	29,377	2,907	3,201	664	***88,338***
Comm., Indust. & Multi-Family	126,606	62,694				***189,300***
Public Authority & Irrigation	111,259	20,679		3,730		***135,668***
Subtotal	**388,635**	**168,240**	**8,397**	**12,978**	**1,918**	***580,168***
% of Total	*67.0%*	*29.0%*	*1.4%*	*2.2%*	*0.3%*	*100.0%*

1. Consumption is per the District's utility billing data as of November 2022 in the Billed Consumption Report by Month spreadsheets.

TABLE 30 : TOTAL AMOUNT OF PUMPING BY ZONE (HCF) *Applies to both Current and Alt. Rate Structures*

TOTAL AMOUNT OF PUMPING BY ZONE (HCF)						
Customer Class	Total Pumping by Zone and Class (hcf/yr.)					*Total Pumping*
	Zone 1	Zone 2	Zone 3	Zone 4	*Zone 5*	
Residential - Tier 1	166,862	68,281	6,744	6,047	1,254	***249,188***
Residential - Tier 2	88,338	36,149	3,571	3,201	664	***131,923***
Comm., Indust. & Multi-Family	189,300	62,694				***251,994***
Public Authority & Irrigation	135,668	24,409		3,730		***163,807***
Subtotal	**580,168**	**191,533**	**10,315**	**12,978**	**1,918**	***796,912***
Percent of Water Use by Zone	*72.8%*	*24.0%*	*1.3%*	*1.6%*	*0.2%*	*100.0%*

TABLE 31 : ZONE ELEVATIONS AND PUMPING COSTS BY CUSTOMER CLASS AND ZONE *Applies to both Current and Alt. Rate Structures*

ZONE ELEVATIONS AND PUMPING COSTS BY CUSTOMER CLASS AND ZONE						
Customer Class	Zone 1	Zone 2	Zone 3	Zone 4	*Zone 5*	*Total Pumping "Units"*
Elevations of Zones (ft AMSL)[1]						
Low Elevation	307	378	536	453	557	
High Elevation	442	541	690	630	568	
Average Elevation	375	460	613	542	563	
Incremental Feet of Elevation Change[2]	**68**	**153**	**306**	**235**	**256**	
Total "Pumping Units" by Zone and Class (hcf/yr.)[3]						
Residential - Tier 1	11,263,154	10,412,876	2,063,793	1,417,967	320,417	**25,478,207**
Residential - Tier 2	5,962,846	5,512,699	1,092,597	750,689	169,632	**13,488,463**
Comm., Indust. & Multi-Family	12,777,750	9,560,835	0	0	0	**22,338,585**
Public Authority & Irrigation	9,157,590	3,722,373	0	874,685	0	**13,754,648**
Subtotal	**39,161,340**	**29,208,783**	**3,156,390**	**3,043,341**	**490,049**	**75,059,903**
% of "Pumping Units" by Zone	**52.2%**	**38.9%**	**4.2%**	**4.1%**	**0.7%**	**100.0%**
Pumping Costs by Zone[4]	**$76,345**	**$56,942**	**$6,153**	**$5,933**	**$955**	**$146,329**

1. Source: *2017 Urban Water Management Plan* .
2. Difference between the Average Elevation and the Low Elevation of Zone 1.
3. "Total Pumping by Zone" times "Incremental Feet in Elevation Change".
4. Percentage of Pumping Units by Zone times pumping costs.

TABLE 32 : ESTIMATED ZONAL PUMPING COSTS AND ZONE RATES BY CUSTOMER CLASS *Applies to both Current and Alt. Rate Structures*

ESTIMATED ZONAL PUMPING COSTS AND ZONE RATES BY CUSTOMER CLASS						
Customer Class	**Pumping and Costs by Zone and Zonal Volumetric Rates**					***Total Pumping Costs***
	Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	***Zone 5***	
Pumping Costs ($)	***$76,345***	***$56,942***	***$6,153***	***$5,933***	***$955***	***$146,329***
Net Pumping by Zone (hcf/yr.)	**388,635**	**168,240**	**8,397**	**12,978**	**1,918**	**580,168**
Zonal Volumetric Rates ($/hcf)	**$0.20**	**$0.34**	**$0.73**	**$0.46**	**$0.50**	
46F/54V Rate Structure						
Customer Class	***Volumetric Rates***	**Volumetric Rates by Zone and Class (hcf/yr.)**				
		Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	***Zone 5***
Residential - Tier 1	***$2.53***	*$2.73*	*$2.87*	*$3.27*	*$2.99*	*$3.03*
Residential - Tier 2	***$3.95***	*$4.15*	*$4.29*	*$4.69*	*$4.41*	*$4.45*
Comm., Indust. & Multi-Family	***$3.02***	*$3.22*	*$3.36*	*$0.00*	*$0.00*	*$0.00*
Public Authority & Irrigation	***$3.02***	*$3.22*	*$3.36*	*$0.00*	*$3.48*	*$0.00*
Alternative Rate Structure (40% Fixed / 60% Variable)						
Customer Class	***Volumetric Rates***	**Volumetric Rates by Zone and Class (hcf/yr.)**				
		Zone 1	**Zone 2**	**Zone 3**	**Zone 4**	***Zone 5***
Residential - Tier 1	***$2.60***	*$2.80*	*$2.94*	*$3.34*	*$3.06*	*$3.10*
Residential - Tier 2	***$4.02***	*$4.22*	*$4.36*	*$4.76*	*$4.48*	*$4.52*
Comm., Indust. & Multi-Family	***$3.10***	*$3.29*	*$3.43*	*$0.00*	*$0.00*	*$0.00*
Public Authority & Irrigation	***$3.10***	*$3.29*	*$3.43*	*$0.00*	*$3.55*	*$0.00*

TABLE 33 : ASSUMPTIONS USED IN DROUGHT RATE ANALYSIS

2023 Consumption Assumptions				
Shortage Level[1]	Percent Shortage Range[2]	Potable Water Consumption (AF/yr.)	Potable Water Consumption (ccf/yr.)	Difference to Baseline (ccf)
1	**Less than 10% Conservation[3]**	**1,265**	**551,214**	**0**
2	Up to 20% Conservation	1,139	496,092	(55,121)
3	Up to 30% Conservation	1,012	440,971	(110,243)
4	Up to 40% Conservation	886	385,850	(165,364)
5	Up to 50% Conservation	759	330,728	(220,486)
6	Greater than 50% Conservation	633	275,607	(275,607)

1. State Water Resources Control Board Water Shortage Contingency Plan Shortage Level.
2. Drought levels based on the State Water Resources Control Board Drought Emergency Water Conservation.
3. This represents the baseline consumption for FY 2020/21 consumption. Conservation percentage for each drought stage is relative to the baseline consumption.

Note: For the rate period (FY 2023/24 - FY 2027/28), water consumption is assumed to be the same each year to be consistent with how volumetric rates were calculated even though there are new connections each year. The rate each year at the "5% Conservation" level is the same as the proposed volumetric rate.

TABLE 34 : DROUGHT RATES

Expenses Directly Effected By Consumption Changes						
Fund	Description	Commodity-Related Costs				
		2023	2024	2025	2026	2027
Operating Fund	Pump Power	$ 262,500	$ 275,625	$ 289,406	$ 303,877	$ 319,070
Operating Fund	Well & Pump Maintenance	61,800	63,654	65,564	67,531	69,556
Operating Fund	Purchased & Leased Water	271,040	279,171	287,546	296,172	305,057
Total:		**$ 595,340**	**$ 618,450**	**$ 642,516**	**$ 667,579**	**$ 693,684**

TABLE 35 : CALCULATION OF DROUGHT RATES FOR FY 2023

Rate Structure: (46% Fixed/54% Volumetric)						
Conservation Goal	Water Consumption (ccf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Response Charge ($/ccf)	Uniform Commodity Rates ($/ccf)
< 10%	551,214	$ 1,667,252	$ -	$ 1,667,252	$0.00	$3.02
Up to 20%	496,092	1,667,252	(59,534)	1,607,718	$0.22	$3.24
Up to 30%	440,971	1,667,252	(119,068)	1,548,184	$0.49	$3.51
Up to 40%	385,850	1,667,252	(178,602)	1,488,650	$0.83	$3.86
Up to 50%	330,728	1,667,252	(297,670)	1,369,582	$1.12	$4.14
> 50%	275,607	1,667,252	(357,204)	1,310,048	$1.73	$4.75

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 36 : CALCULATION OF DROUGHT RATES FOR FY 2024

Rate Structure: (46% Fixed/54% Volumetric)						
Conservation Goal	Water Consumption (ccf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Response Charge ($/ccf)	Uniform Commodity Rates ($/ccf)
< 10%	551,214	$ 1,867,322	$ -	$ 1,867,322	$0.00	$3.39
Up to 20%	496,092	1,867,322	(61,845)	1,805,477	$0.25	$3.64
Up to 30%	440,971	1,867,322	(123,690)	1,743,632	$0.57	$3.95
Up to 40%	385,850	1,867,322	(185,535)	1,681,787	$0.97	$4.36
Up to 50%	330,728	1,867,322	(247,380)	1,619,942	$1.51	$4.90
> 50%	275,607	1,867,322	(309,225)	1,558,097	$2.27	$5.65

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 37 : CALCULATION OF DROUGHT RATES FOR FY 2025

Rate Structure: (46% Fixed/54% Volumetric)						
Conservation Goal	Water Consumption (ccf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Response Charge ($/ccf)	Uniform Commodity Rates ($/ccf)
< 10%	551,214	$ 2,091,401	$ -	$ 2,091,401	$0.00	$3.79
Up to 20%	496,092	2,091,401	(64,252)	2,027,149	$0.29	$4.09
Up to 30%	440,971	2,091,401	(128,503)	1,962,897	$0.66	$4.45
Up to 40%	385,850	2,091,401	(192,755)	1,898,646	$1.13	$4.92
Up to 50%	330,728	2,091,401	(257,006)	1,834,394	$1.75	$5.55
> 50%	275,607	2,091,401	(321,258)	1,770,143	$2.63	$6.42

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 38 : CALCULATION OF DROUGHT RATES FOR FY 2026

Rate Structure: (46% Fixed/54% Volumetric)						
Conservation Goal	Water Consumption (ccf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Response Charge ($/ccf)	Uniform Commodity Rates ($/ccf)
< 10%	551,214	$ 2,300,541	$ -	$ 2,300,541	$0.00	$4.17
Up to 20%	496,092	2,300,541	(66,758)	2,233,783	$0.33	$4.50
Up to 30%	440,971	2,300,541	(133,516)	2,167,025	$0.74	$4.91
Up to 40%	385,850	2,300,541	(200,274)	2,100,267	$1.27	$5.44
Up to 50%	330,728	2,300,541	(267,032)	2,033,509	$1.97	$6.15
> 50%	275,607	2,300,541	(333,790)	1,966,751	$2.96	$7.14

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 39 : CALCULATION OF DROUGHT RATES FOR FY 2027

Rate Structure: (46% Fixed/54% Volumetric)						
Conservation Goal	Water Consumption (ccf/yr.)	Baseline Rev. Req't from Vol. Charges	Cost Reduction Due to Conservation[1]	Target Rev. Req't from Vol. Charges	Drought Response Charge ($/ccf)	Uniform Commodity Rates ($/ccf)
< 10%	551,214	$ 2,530,595	$ -	$ 2,530,595	$0.00	$4.59
Up to 20%	496,092	2,530,595	(69,368)	2,461,226	$0.37	$4.96
Up to 30%	440,971	2,530,595	(138,737)	2,391,858	$0.83	$5.42
Up to 40%	385,850	2,530,595	(208,105)	2,322,489	$1.43	$6.02
Up to 50%	330,728	2,530,595	(277,474)	2,253,121	$2.22	$6.81
> 50%	275,607	2,530,595	(346,842)	2,183,753	$3.33	$7.92

1. Cost reduction equals the conservation goal percentage multiplied by expenses directly effected by consumption charges.

TABLE 40 : CURRENT VS. PROPOSED WATER RATES

46F/54V Rate Structure (35% Fixed/65% Volumetric)

Water Rate Schedule	Current Rates	Proposed Water Rates				
		2023	2024	2025	2026	2027
Fixed Service Charges	**Monthly Rates**					
Single- and Multi-Family Residential:						
5/8 inch	$40.97	$45.84	$51.34	$57.50	$63.25	$69.57
3/4 inch	$52.94	$59.52	$66.66	$74.66	$82.13	$90.34
1 inch	$76.88	$86.88	$97.31	$108.98	$119.88	$131.87
1.5 inch	$136.73	$155.29	$173.92	$194.79	$214.27	$235.70
2 inch	$208.56	$237.38	$265.86	$297.77	$327.54	$360.30
3 inch	$400.08	$456.28	$511.03	$572.36	$629.59	$692.55
4 inch	$615.54	$702.55	$786.85	$881.28	$969.40	$1,066.34
6 inch	$1,214.04	$1,386.62	$1,553.02	$1,739.38	$1,913.32	$2,104.65
8 inch	$1,932.25	$2,207.51	$2,472.41	$2,769.10	$3,046.01	$3,350.61
Tiered Volumetric Charges (Residential - Tier 1, 0-20 hcf)						
Zone 1	$2.33	$2.73	$3.06	$3.42	$3.77	$4.14
Zone 2	$2.59	$2.87	$3.22	$3.60	$3.96	$4.36
Zone 3	$2.85	$3.27	$3.66	$4.10	$4.51	$4.96
Zone 4	$2.64	$2.99	$3.35	$3.75	$4.13	$4.54
Zone 5	$2.84	$3.03	$3.39	$3.80	$4.18	$4.60
Tiered Volumetric Charges (Residential - Tier 2, 20+ hcf)						
Zone 1	$3.96	$4.15	$4.65	$5.21	$5.73	$6.30
Zone 2	$4.22	$4.29	$4.81	$5.38	$5.92	$6.51
Zone 3	$4.48	$4.69	$5.25	$5.88	$6.47	$7.11
Zone 4	$4.27	$4.41	$4.94	$5.53	$6.09	$6.69
Zone 5	$4.48	$4.45	$4.99	$5.58	$6.14	$6.76
Uniform Volumetric Charges (Commercial, Industrial & Multi-Family Customers)						
Zone 1	$2.77	$3.22	$3.61	$4.04	$4.44	$4.89
Zone 2	$3.03	$3.36	$3.77	$4.22	$4.64	$5.10
Zone 4	$3.08	n.a.	n.a.	n.a.	n.a.	n.a.
Uniform Volumetric Charges (Public Authority & Irrigation Customers)						
Zone 1	$3.06	$3.22	$3.61	$4.04	$4.44	$4.89
Zone 2	$3.32	$3.36	$3.77	$4.22	$4.64	$5.10
Zone 4	$3.37	$3.48	$3.90	$4.37	$4.80	$5.28

1. The 2024 rate increase will be effective January 1, 2024, and all subsequent rate increases will be effective on January 1st of each year.

TABLE 41 : CURRENT VS. PROPOSED PRIVATE FIRE RATES

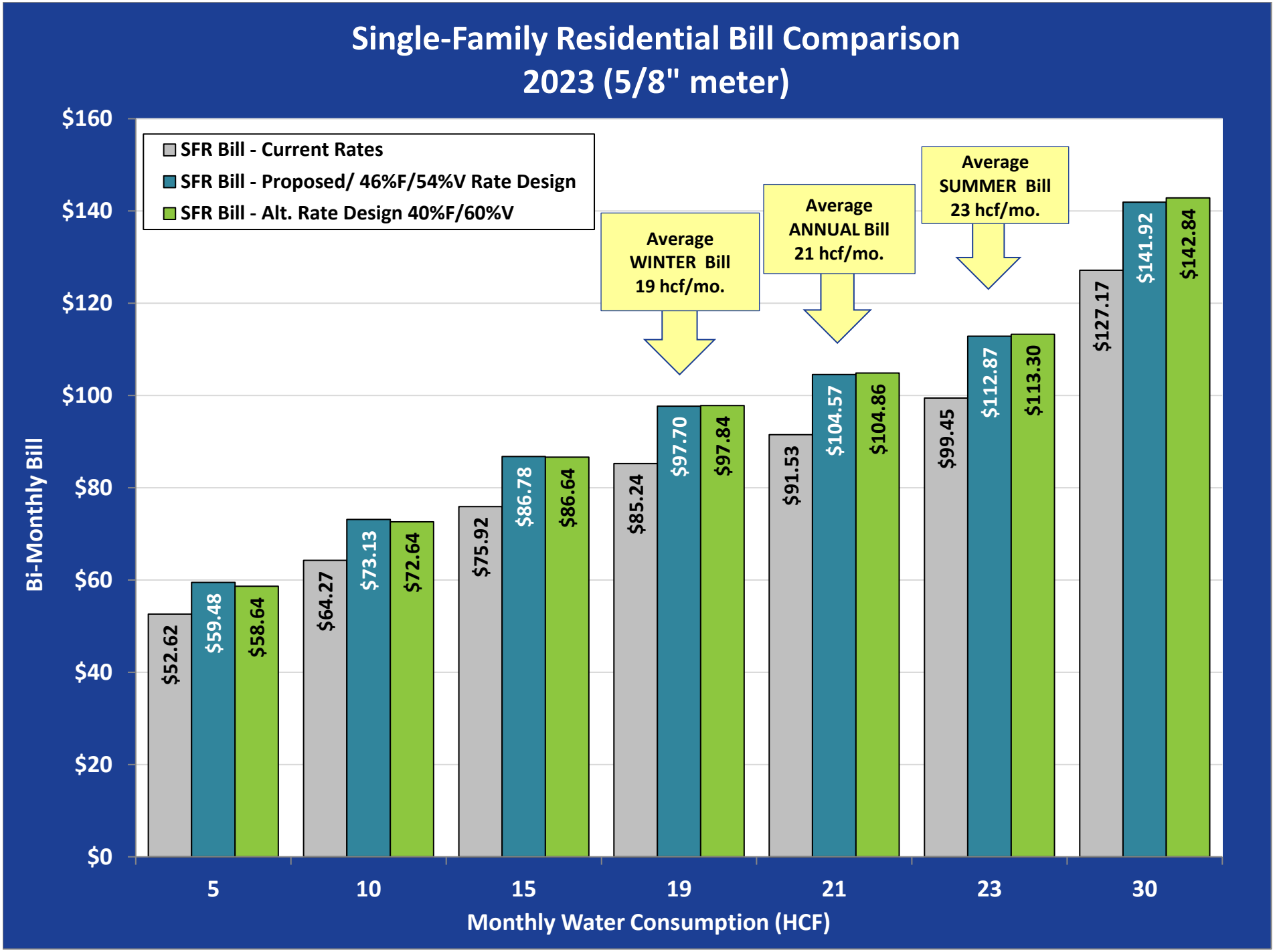
Proposed Rate Structure (46% Fixed / 54% Variable)

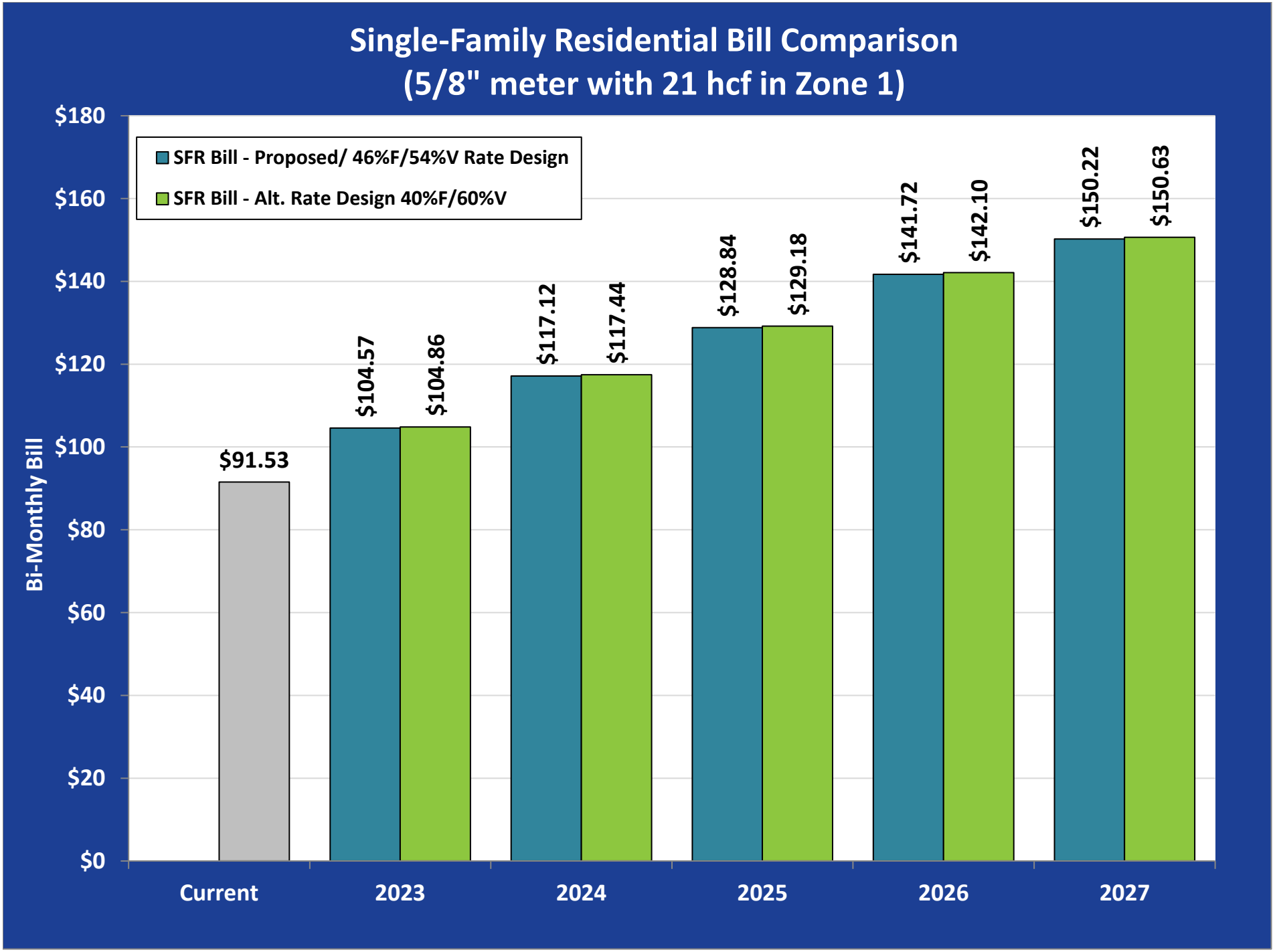
Private Fire Service Bi-monthly fixed charge	Current Rates	Proposed Fire Service Water Rates				
		2023	2024	2025	2026	2027
4 inch	$50.91	$147.63	$165.35	$185.19	$203.71	$224.08
6 inch	$131.00	$313.70	$351.34	$393.50	$432.85	$476.13
8 inch	$269.15	$535.11	$599.33	$671.24	$738.37	$812.21
10 inch	$348.86	$830.33	$929.97	$1,041.57	$1,145.73	$1,260.30
12 inch	$558.06	$1,236.26	$1,384.61	$1,550.77	$1,705.85	$1,876.43

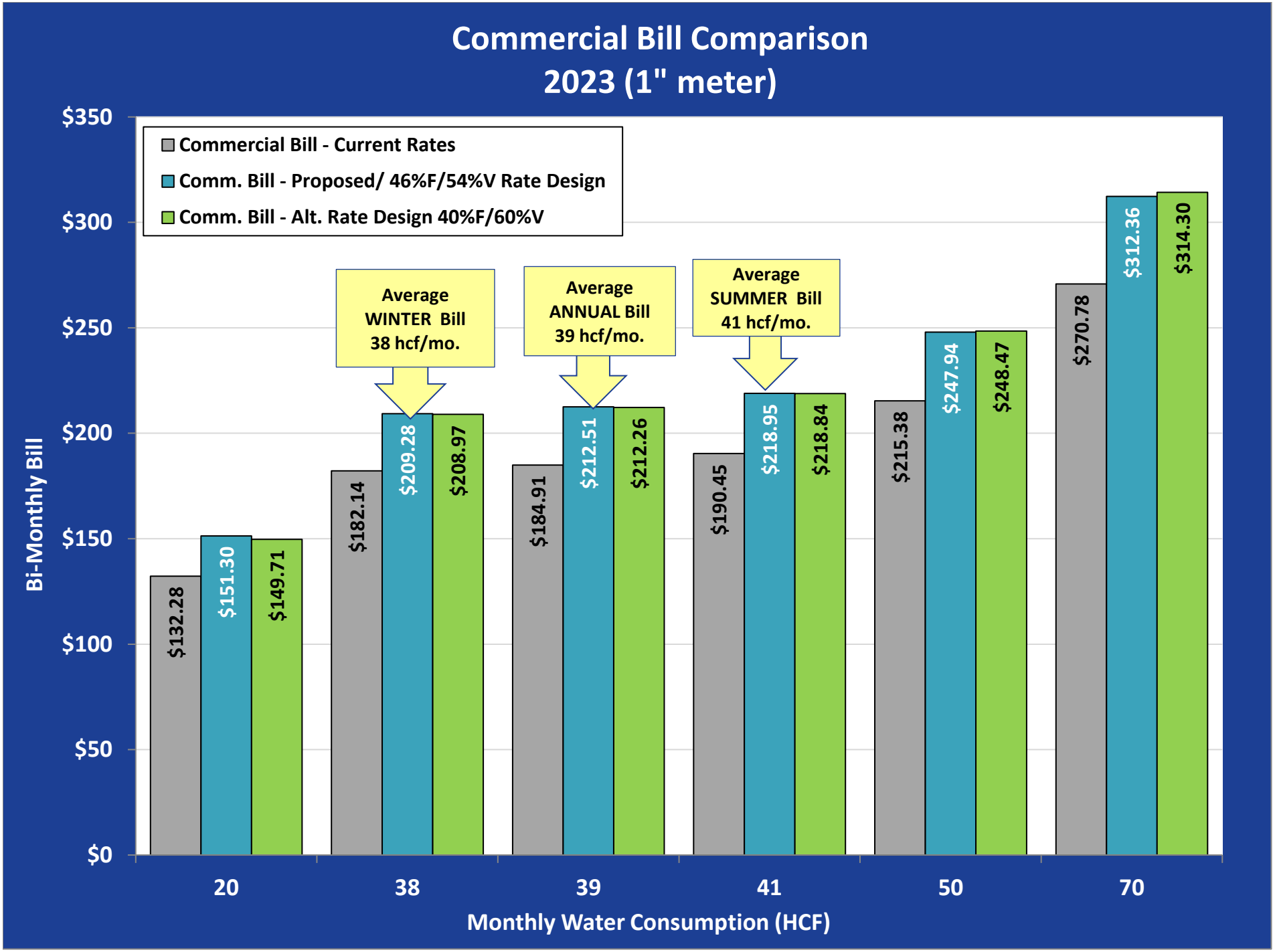
TABLE 42 : PROPOSED DROUGHT RATES 46/54 Rate Structure

Proposed Rate Structure (46% Fixed / 54% Variable)

Water Rate Schedule	Current Rates	Proposed Drought Rates				
		2023	2024	2025	2026	2027
Uniform Volumetric Charges (by Conservation Goal)						
< 10%	N/A	$3.02	$3.39	$3.79	$4.17	$4.59
Up to 20%	N/A	$3.24	$3.64	$4.09	$4.50	$4.96
Up to 30%	N/A	$3.51	$3.95	$4.45	$4.91	$5.42
Up to 40%	N/A	$3.86	$4.36	$4.92	$5.44	$6.02
Up to 50%	N/A	$4.14	$4.90	$5.55	$6.15	$6.81


Single-Family Residential Bill Comparison
2023 (5/8" meter)
SFR Bill - Current Rates
SFR Bill - Proposed/ 46%F/54%V Rate Design
SFR Bill - Alt. Rate Design 40%F/60%V
Average WINTER Bill 19 hcf/mo.
Average ANNUAL Bill 21 hcf/mo.
Average SUMMER Bill 23 hcf/mo.
Bi-Monthly Bill
$0
$20
$40
$60
$80
$100
$120
$140
$160
$52.62
$59.48
$58.64
$64.27
$73.13
$72.64
$75.92
$86.78
$86.64
$85.24
$97.70
$97.84
$91.53
$104.57
$104.86
$99.45
$112.87
$113.30
$127.17
$141.92
$142.84
5
10
15
19
21
23
30
Monthly Water Consumption (HCF)


Single-Family Residential Bill Comparison
(5/8" meter with 21 hcf in Zone 1)
SFR Bill - Proposed/ 46%F/54%V Rate Design
SFR Bill - Alt. Rate Design 40%F/60%V
Bi-Monthly Bill
$180
$160
$140
$120
$100
$80
$60
$40
$20
$0
$91.53
$104.57
$104.86
$117.12
$117.44
$128.84
$129.18
$141.72
$142.10
$150.22
$150.63
Current
2023
2024
2025
2026
2027


Commercial Bill Comparison
2023 (1" meter)
Commercial Bill - Current Rates
Comm. Bill - Proposed/ 46%F/54%V Rate Design
Comm. Bill - Alt. Rate Design 40%F/60%V
Average WINTER Bill 38 hcf/mo.
Average ANNUAL Bill 39 hcf/mo.
Average SUMMER Bill 41 hcf/mo.
$132.28
$151.30
$149.71
$182.14
$209.28
$208.97
$184.91
$212.51
$212.26
$190.45
$218.95
$218.84
$215.38
$247.94
$248.47
$270.78
$312.36
$314.30
$0
$50
$100
$150
$200
$250
$300
$350
Bi-Monthly Bill
20
38
39
41
50
70
Monthly Water Consumption (HCF)

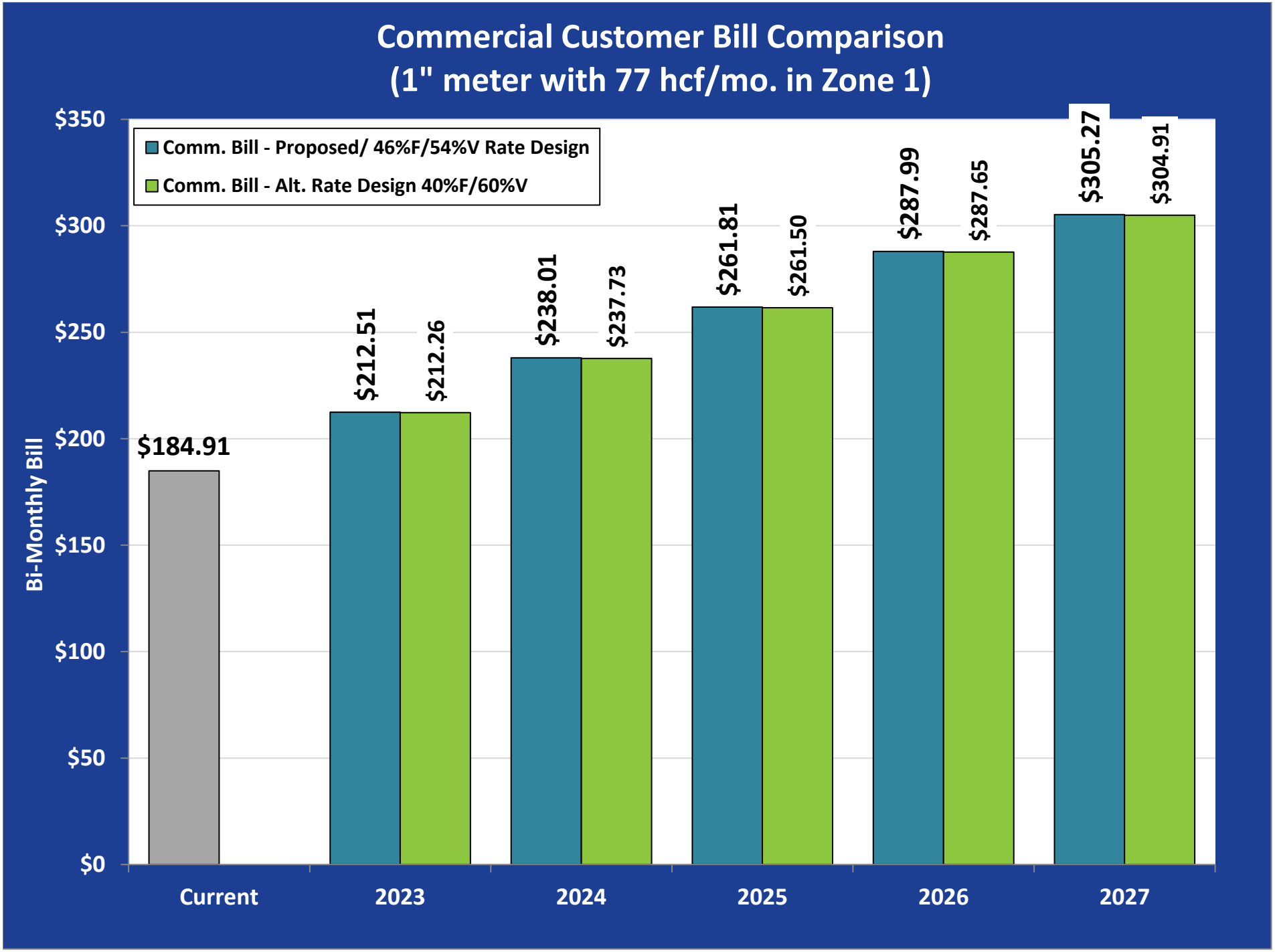

Commercial Customer Bill Comparison
(1" meter with 77 hcf/mo. in Zone 1)
Comm. Bill - Proposed/ 46%F/54%V Rate Design
Comm. Bill - Alt. Rate Design 40%F/60%V
Bi-Monthly Bill
$350
$300
$250
$200
$150
$100
$50
$0
$184.91
$212.51
$212.26
$238.01
$237.73
$261.81
$261.50
$287.99
$287.65
$305.27
$304.91
Current
2023
2024
2025
2026
2027

EXHIBIT B

Important Information About Your Water Rates

Notice of PUBLIC HEARING

Proposed Adjustments to Water Rates

Disponible En Español
Visite ***lapuentewater.com/rates*** para obtener una copia de este aviso en Español

Meeting Date/Time:

Monday, October 9, 2023 at 4:30p.m.

Meeting Location:

District Office
112 N 1st. Street
La Puente, California 91744

Included in this Notice:

Este informe contiene información muy importante sobre su agua potable. Para mas información ó traducción, favor de contactar a (626) 330-2126.

Important Information About Your Water Rates

This serves as notice that La Puente Valley County Water District's Board of Directors will conduct a public hearing to consider recommended adjustments to the District's water service rates for the next five years.

All members of the public are invited to attend a public hearing to review the proposed rate study.

October 9, 2023 at 4:30p.m.
District Office
112 N 1st. Street
La Puente, California 91744

This notice is being furnished to you by La Puente Valley County Water District (LPVCWD or District) pursuant to California Constitution Article XIIID (also known as "Proposition 218"). Under the terms of Proposition 218, LPVCWD is required to notify the property owners of record of proposed changes to property-related fees, such as water service.

Why have you received this notice?

You have received this information because LPVCWD is evaluating rate adjustments that would affect your water bill. The proposed changes are based on a cost-of-service study conducted by an independent finance consultant. The research, reasoning and analysis behind the proposed adjustments are explained in this document and will be addressed at the upcoming public hearing.

If approved, the proposed rate adjustments will be implemented on:

October 15, 2023 (year one); October 15, 2024 (year two); October 15, 2025 (year three); October 15, 2026 (year four); and October 15, 2027 (year five).

Under California state law, all property owners and customers of record may submit a written protest to the proposed rate changes. Only one protest per parcel is permitted.

Please refer to the "How Can You Participate?" section on page 7 for instructions on submitting a formal written protest against the proposed action. All written protests will be verified. You may also appear at the public hearing to share any comments or concerns.

More information about the rates included in this document and how to participate is available online at: *lapuentewater.com/rates*

Si gustaría obtener esta información en español, por favor visite lapuentewater.com/rates o contáctenos a (626) 330-2126.

Why are rate changes necessary?

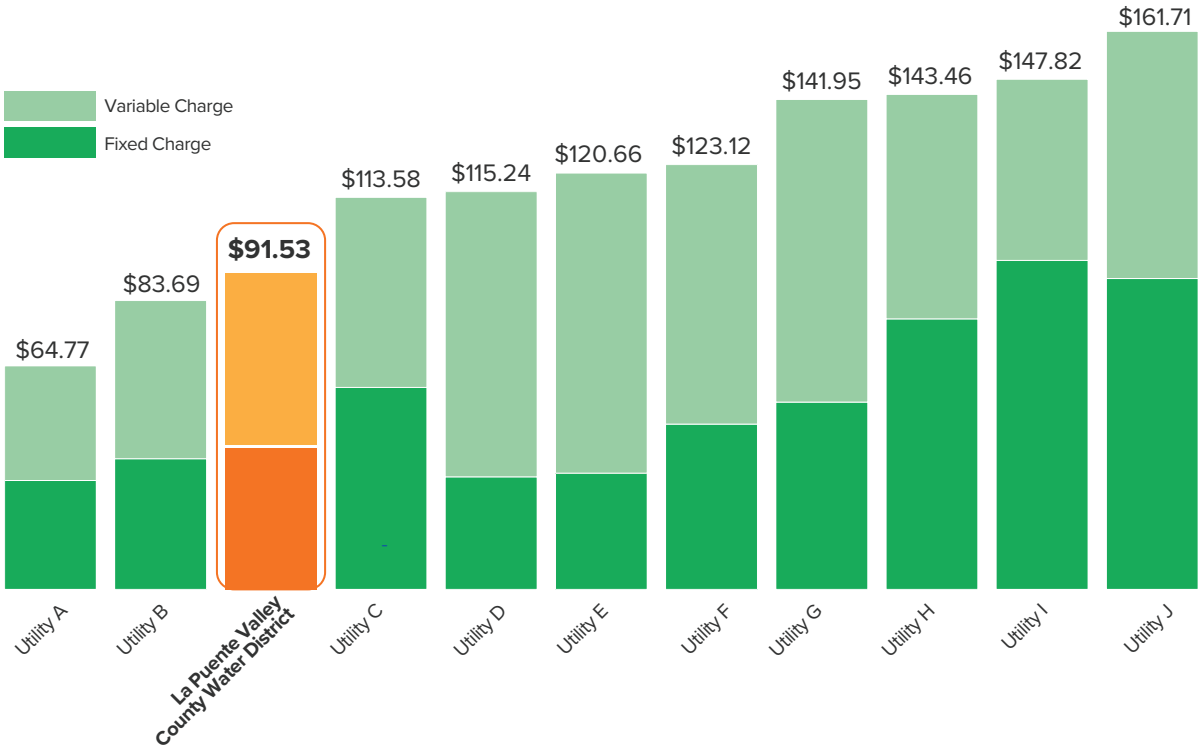
The District has considered numerous factors when reviewing a potential rate change, including the cost of operations and maintenance and securing reliable water supplies. LPVCWD hired an independent consultant to perform a cost-of-service study and determine the revenue required to maintain current service levels. The study demonstrates what it costs the District to provide water service and the appropriate rates to fairly and appropriately allocate the costs of providing water to our customers.

The proposed new rates will allow LPVCWD to address the following needs:

- ***Water Supply Management***
- ***Emergency Reserves***
- ***System Reliability***
- ***Rising Costs for Producing Water***
- ***System Upgrades to Meet Demand***
- ***Emergency Preparedness***

Regional Residential Bi-Monthly Water Bill Comparison

The District's current rates are well below similar water utilities in the region.



Water rate comparison includes variable and fixed charges based on a meter size of 5/8" and consumption of 21 hundred cubic feet.

Keeping Water Affordable

The District regularly looks for opportunities to secure alternative funding sources such as grants to support its water system improvement program. These efforts enhance LPVCWD's public health and safety programs, educational projects, water awareness and conservation workshops, and community engagement.

La Puente Valley County Water District has successfully secured $1.275 million in alternate funding from federal grant sources.

Water Treatment

Ensures a safe and reliable potable water supply.

Grant Funding Offsets Financial Impact on Customers

Disaster Relief

Reimbursement funding for activities that supported the District's drought response efforts.

System Improvements

Supports infrastructure upgrades for the water distribution system.

Projects that will be completed in this rate cycle would include recycled water efforts, nitrate treatment system, pumping improvements, well rehabilitation, waterline replacements, vehicle repair/replacement, and equipment needs.

What are rates used for?

Maintaining pumps, pipes and equipment is an important part of ensuring that the District's customers receive high-quality water and exceptional service. In times of drought, groundwater levels have reached historic lows and require additional resources to manage water supplies. Water system operations managed by the District include:

- *Pumping / Accessing Water Supply*
- *Water Treatment*
- *Water Storage*
- *Water Delivery*
- *General & Administrative*

The LPVCWD manages approximately 2,500 retail metered water service connections in a 2.5 square mile service area.

- *33 Miles of Pipeline*
- *4.9 Million Gallons Reservoir Storage*
- *13 Booster Pumps*
- *5 Pressure Zones*
- *3 Wells*
- *3.5 Million Gallon Treatment Facility*

The District continuously invests in capital improvement projects that improve the performance of the water system or extend the life of existing facilities and equipment to avoid more expensive emergency repairs.

Understanding Your Water Rate Structure

Residential water rates are made up of two components, fixed and variable charges.

1 *Fixed Charges*

These charges cover the cost of maintaining the reliability of the water system, including maintenance, repair and replacement of infrastructure, water quality testing, meter reading, debt payments, and employee salaries.

2 *Variable Charges*

These charges are based on how much water is delivered to a home and includes the cost to produce groundwater and purchase imported water, electricity, and treatment chemicals.

The District has a five-zone, two tiered variable rate structure for the amount of water used by residential accounts, and zonal rate structure for multi-family, commercial and industrial accounts, fireline and construction services.

Included in Your Rates

The District works hard each day to provide a reliable, safe water supply while also striving to keep rates manageable. Costs to operate the water system and meet regulatory requirements are on the rise. Power, treatment chemical, insurance, wages and groundwater assessments have increased rapidly these past years. Absent rate increases, LPVCWD would experience budget shortfalls.

La Puente Valley County Water District is considering a five-year schedule of changes to water rates and charges that could affect your monthly bill. The District is proposing changes to water commodity charges, fixed service charges, and drought rates.

As a public agency, LPVCWD cannot earn a profit from the services it provides, and must charge no more than the actual costs associated with providing services to its customers.

Cost of Water

The District is fortunate to have rights to a local groundwater source in the Main San Gabriel Basin. Anything we pump over our allotment must be replaced to maintain healthy water levels in the basin – either by leasing rights or purchasing imported water. Groundwater levels have been impacted significantly by many years of drought.

Understanding Drought Rates

In times of drought, State water regulators and local water availability require LPVCWD to implement mandatory conservation measures to protect and extend the water supply. To ensure these requirements are met and continue meeting the water needs of our customers in a reliable and affordable manner, the District is proposing drought rates.

These rates may be implemented by the Board of Directors during declared drought levels, state-mandated reductions in the level of potable water usage, or other natural disasters or events that result in a water shortage and the need to require reductions in water usage.

Ensure Compliance With All Local and/or State Water Conservation Mandates

Collect Sufficient Revenue to Continue Providing Safe and Reliable Water Service

Drought rates account for various stages of water conservation to allow the District to continue meeting its financial obligations during times of significant conservation.

These drought rates were developed to align with the State Water Resources Control Board Water Shortage Contingency Plan Shortage Level, which requires the Board to act to implement the drought/conservation rates.

Managing Groundwater

Groundwater pumping assessments are imposed to secure additional water resources to maintain water levels in the Basin. Although necessary, this assessment has a large cost impact on all water providers that pump groundwater in the San Gabriel Valley.

Residential Water Rate Structure

The District incurs additional expense as water usage goes up because the District must use leased water rights to meet that increased demand. Tier 1 rates are based on the District's allocated source of water supply and Tier 2 rates are based on purchased/leased water that the District is required to purchase to meet consumption demands.

Proposed rates would take effect on October 15, 2023.

Proposed Residential Water Rate Charges (2023 — 2027)

Bi-Monthly Service Charge – Single & Multifamily Residential (Based On Meter Size)

FIXED SERVICE CHARGES	CURRENT RATE	EFFECTIVE OCT 2023	EFFECTIVE OCT 2024	EFFECTIVE OCT 2025	EFFECTIVE OCT 2026	EFFECTIVE OCT 2027
5/8 Inch	$ 40.97	$ 45.84	$ 51.34	$ 57.50	$ 63.25	$ 69.57
3/4 Inch	$ 52.94	$ 59.52	$ 66.66	$ 74.66	$ 82.13	$ 90.34
1 Inch	$ 76.88	$ 86.88	$ 97.31	$ 108.98	$ 119.88	$ 131.87
1.5 Inch	$ 136.73	$ 155.29	$ 173.92	$ 194.79	$ 214.27	$ 235.70
2 Inch	$ 208.56	$ 237.38	$ 265.86	$ 297.77	$ 327.54	$ 360.30
3 Inch	$ 400.08	$ 456.28	$ 511.03	$ 572.36	$ 629.59	$ 692.55
4 Inch	$ 615.54	$ 702.55	$ 786.85	$ 881.28	$ 969.40	$ 1,066.34
6 Inch	$ 1,214.04	$ 1,386.62	$ 1,553.02	$ 1,739.38	$ 1,913.32	$ 2,104.65
8 Inch	$ 1,932.25	$ 2,207.51	$ 2,472.41	$ 2,769.10	$ 3,046.01	$ 3,350.61

Variable Rate – Tier One Volumetric Charges (Residential) - 0-20 hcf

TIER ONE	CURRENT RATE	EFFECTIVE OCT 2023	EFFECTIVE OCT 2024	EFFECTIVE OCT 2025	EFFECTIVE OCT 2026	EFFECTIVE OCT 2027
Zone 1	$ 2.33	$ 2.73	$ 3.06	$ 3.42	$ 3.77	$ 4.14
Zone 2	$ 2.59	$ 2.87	$ 3.22	$ 3.60	$ 3.96	$ 4.36
Zone 3	$ 2.85	$ 3.27	$ 3.66	$ 4.10	$ 4.51	$ 4.96
Zone 4	$ 2.64	$ 2.99	$ 3.35	$ 3.75	$ 4.13	$ 4.54
Zone 5	$ 2.84	$ 3.03	$ 3.39	$ 3.80	$ 4.18	$ 4.60

Variable Rate – Tier Two Volumetric Charges (Residential) - 20+ hcf

TIER TWO	CURRENT RATE	EFFECTIVE OCT 2023	EFFECTIVE OCT 2024	EFFECTIVE OCT 2025	EFFECTIVE OCT 2026	EFFECTIVE OCT 2027
Zone 1	$ 3.96	$ 4.15	$ 4.65	$ 5.21	$ 5.73	$ 6.30
Zone 2	$ 4.22	$ 4.29	$ 4.81	$ 5.38	$ 5.92	$ 6.51
Zone 3	$ 4.48	$ 4.69	$ 5.25	$ 5.88	$ 6.47	$ 7.11
Zone 4	$ 4.27	$ 4.41	$ 4.94	$ 5.53	$ 6.09	$ 6.69
Zone 5	$ 4.48	$ 4.45	$ 4.99	$ 5.58	$ 6.14	$ 6.76

HCF = hundred cubic feet 1 HCF = 748 gallons

Commercial/Industrial/Multi-family or Public Authority/Irrigation Water Rate Structure

Non-residential customers are classified as either commercial/industrial/ multi-family or public authority/irrigation customers with a uniform rate.

Proposed rates would take effect on October 15, 2023.

Proposed Commercial, Industrial & Multi-Family Water Rate Charges (2023 — 2027)

Uniform Volumetric Charges (Commercial, Industrial & Multi-Family)

ZONE	CURRENT RATE	**EFFECTIVE OCT 2023**	EFFECTIVE OCT 2024	EFFECTIVE OCT 2025	EFFECTIVE OCT 2026	EFFECTIVE OCT 2027
Zone 1	$ 2.77	$ 3.22	$ 3.61	$ 4.04	$ 4.44	$ 4.89
Zone 2	$ 3.03	$ 3.36	$ 3.77	$ 4.22	$ 4.64	$ 5.10
Zone 4	$ 3.08	N/A	N/A	N/A	N/A	N/A

Proposed Public Authority & Irrigation Customers Water Rate Charges (2023 — 2027)

Uniform Volumetric Charges (Public Authority & Irrigation Customers)

ZONE	CURRENT RATE	**EFFECTIVE OCT 2023**	EFFECTIVE OCT 2024	EFFECTIVE OCT 2025	EFFECTIVE OCT 2026	EFFECTIVE OCT 2027
Zone 1	$ 3.06	$ 3.22	$ 3.61	$ 4.04	$ 4.44	$ 4.89
Zone 2	$ 3.32	$ 3.36	$ 3.77	$ 4.22	$ 4.64	$ 5.10
Zone 4	$ 3.37	$ 3.48	$ 3.90	$ 4.37	$ 4.80	$ 5.28

Fire Protection costs are those costs associated with providing sufficient capacity in the system for fire meters and other operations and maintenance costs of providing water to properties for private fire service protection.

Proposed Private Fire Service Rate Charges (2023 — 2027)

Fire Service Charge

SIZE	CURRENT RATE	**EFFECTIVE OCT 2023**	EFFECTIVE OCT 2024	EFFECTIVE OCT 2025	EFFECTIVE OCT 2026	EFFECTIVE OCT 2027
4 Inch	$ 50.91	$ 147.63	$ 165.35	$ 185.19	$ 203.71	$ 224.08
6 Inch	$ 131.00	$ 313.70	$ 351.34	$ 393.50	$ 432.85	$ 476.13
8 Inch	$ 269.15	$ 535.11	$ 599.33	$ 671.24	$ 738.37	$ 812.21
10 Inch	$ 348.86	$ 830.33	$ 929.97	$ 1,041.57	$ 1,145.73	$ 1,260.30
12 Inch	$ 558.06	$ 1,236.26	$ 1,384.61	$ 1,550.77	$ 1,705.85	$ 1,876.43

Drought Rate Structure

The District has five levels of conservation goals based on water shortage levels. Each conservation goal will require customers to reduce their water use by the percentage at that level.

During a water shortage, the District may be required to implement drought response actions that would include possible water rate increases due to changes in costs in providing customers with water during a shortage. These proposed charges are shown in the table below.

Drought response actions may include development of drought plans, water-use efficiency programs, education programs, regional partnerships in case of emergency, and water shortage contingency plans.

Proposed Drought Charges (2023 — 2027)

Drought Response Charge ($/ccf) Added to Existing Volumetric Rate for Each Customer Class by Conservation Goal

WATER SHORTAGE LEVEL/CONSERVATION GOAL	CURRENT RATE	DROUGHT RESPONSE CHARGE ($/CCF) **EFFECTIVE OCT 2023**	DROUGHT RESPONSE CHARGE ($/CCF) **EFFECTIVE OCT 2024**	DROUGHT RESPONSE CHARGE ($/CCF) **EFFECTIVE OCT 2025**	DROUGHT RESPONSE CHARGE ($/CCF) **EFFECTIVE OCT 2026**	DROUGHT RESPONSE CHARGE ($/CCF) **EFFECTIVE OCT 2027**
<10%	N/A	$ 0.00	$ 0.00	$ 0.00	$ 0.00	$ 0.00
Up to 20%	N/A	$ 0.22	$ 0.25	$ 0.29	$ 0.33	$ 0.37
Up to 30%	N/A	$ 0.49	$ 0.57	$ 0.66	$ 0.74	$ 0.83
Up to 40%	N/A	$ 1.12	$ 1.51	$ 1.75	$ 1.97	$ 2.22
Up to 50%	N/A	$ 1.73	$ 2.27	$ 2.63	$ 2.96	$ 3.33

The conservation goals listed above correlate with the stages of water supply emergencies described in the District's Water Conservation Resolution No. 273 (available online at ***lapuentewater.com/water-conservation***).

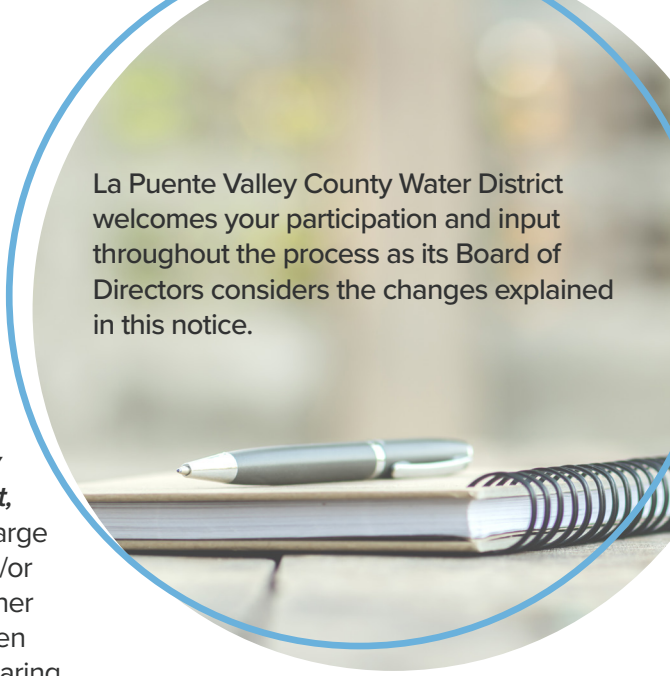
Since the District is currently at a Stage One Water Supply Emergency and pending approval of these rates by the Board of Directors, drought charges for the first goal level of < 10% water usage may be implemented in October.

How can you participate?

If you have questions or comments about LPVCWD's proposed rates, you can:

Call, visit or log-on. More information on the projected increases, including the rate study, is available for review at the LPVCWD office, or on our website, lapuentewater.com/rates. For more information, please call (626) 330-2126.

Write. ***Property owners and/or account holders may submit written protests by mail or in person to La Puente Valley County Water District, Attention: Secretary of the Board, 112 N. 1st Street, La Puente, California 91744.*** Protests must specify the rate or charge being protested and must include your name, parcel number and/or service address, and signature. Protests submitted by email or other electronic means do not count as formal written protests. All written protests must be received prior to the conclusion of the public hearing and only one written protest per parcel will be considered. There is a 120-day statute of limitations for challenging any new, increased, or extended fee or charge.



Attend the public meeting. Members of the public are welcome to attend the public hearing regarding the proposed rate changes. The hearing will take place on October 9, 2023, at 4:30 p.m. at 112 N 1st. Street, La Puente, California 91744. At the hearing, all members of the public will have an opportunity to speak, but verbal comments alone do not qualify as a formal protest.

Public Hearing Process. At the time of the public hearing, the Board of Directors will hear and consider all written protests and public comments. After the public hearing, if a majority of the property owners or customers of record of the impacted parcels submit written protests in opposition to the proposed rate adjustments, the adjustments will not be adopted. If a majority written protest is not received, LPVCWD's Board of Directors may adopt the proposed changes, though they are not obligated to. If adopted, the proposed rates will become effective October 15, 2023, and scheduled adjustments will be implemented over the next five years, as explained in this document.

112 N. 1st Street
La Puente, California 91744

Important Information About Your Water Rates

All members of the public are invited to participate in a public hearing regarding proposed changes to your water rates on October 9, 2023 at 4:30p.m. at 112 N 1st. Street, La Puente, California 91744.

Additional information is available online at lapuentewater.com/rates.

Board Meetings (Reuniones De La Junta Directiva)
2nd and 4th Monday at 4:30 p.m. (2º y 4º lunes a las 4:30 p.m.)
112 N. 1st Street, La Puente

Office Hours (Horario de Oficina)
Monday — Thursday (lunes a jueves): 7:30 a.m. to 4:00 p.m.
Friday (viernes): 7:00 a.m. to 3:30 p.m.